Berichte

aus dem

Institut für Meereskunde

an der

Christian-Albrechts-Universität, Kiel

Nr. 127

1984

Eulerian Current Measurements from the North East Atlantic March 1982 - October 1983

- A Data Report -

by

T.J. Müller

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Contents

Summary

Earlier measurements from two NEADS (North East Atlantic Dynamic Studies) mooring sites were continued from March 1982 until April 1983 (site N11, ~35°N, 23°W) and from March 1982 until October 1983 (site N1, ~33°N, 22°W) as part of the German research programme 'Warmwassersphäre'. From full depth current meter moorings data are presented as basic statistics and high frequency ($\omega \geq 1/512$ cph) energy density spectra as well as low pass filtered ($\omega \leq 1/48$ cph) statistics and time series plots.

Zusammenfassung

Frühere Messungen von zwei Verankerungspositionen des NEADS (North East Atlantic Dynamic Studies) Programms wurden von März 1982 an im Rahmen des Sonderforschungsbereichs 133 "Warmwassersphäre" fortgesetzt. Die gewonnenen Zeitreihen auf der Position N11 (~35°N, 23°W) umfassen nunmehr ingesamt den Zeitraum von Juli 1981 - April 1983, die auf der Position N1 (~33°N, 22°W) den von April 1980 - Oktober 1983. In diesem Bericht sind von den seit März 1982 gewonnenen Daten statistische Größen und die hochfrequenten Anteile ($\omega \geq 1/512$ cph) in den Energiedichtespektren dargestellt. Außerdem werden von den tiefpaßgefliterten ($\omega \leq 1/48$ cph) Zeitreihen zugehörige statistische Größen und Zeitreihen gezeigt.

Introduction

Within the frame of the German research programme 'Warmwassersphäre' since 1980 intensive hydrographic and current meter mooring work was conducted north and southeast of the Azores. The work north of the Azores is reported by Fahrbach et al. (1983a, b).

Southeast of the Azores the main aim is to study the recirculation régime of the North Atlantic Current system. First results concerning the structure of the subtropical front as well as eddying and fluctuative heat flux have been published or are in press (Käse and Siedler, 1982; Käse et al., 1984). Flow statistics based on data until the end of 1980 are presented by Dickson (1983). Based on more data from current meter moorings, statistics and aspects of the mean deep flow in the Eastern basins are discussed by Dickson et al. (1984).

The present report contains basic statistics and high frequency ($\omega \geq 1/512$ cph) energy density spectra as well as low pass filtered ($\omega \leq 1/48$ cph) flow statistics and time series plots of records from two mooring sites (N1 and N11 in fig. 1). The positions are the same as for previous NEADS (North East Atlantic Dynamic Studies) sites. The respective time ranges are March 1982 - April 1983 for N1 and N11, and April 1983 - October 1984 for N1. Position N1 is still occupied. An overview over all available records from all sites in the Northern Canary Basis is given in table 1. Previous data from these and other sites occupied by IfM Kiel during NEADS are presented in Müller (1981) and Müller and Zenk (1983).

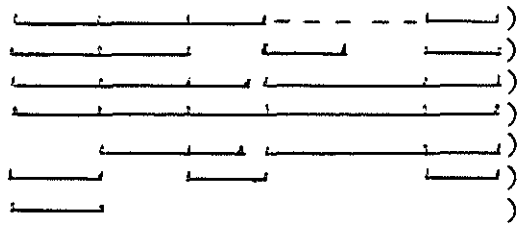
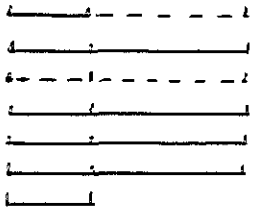
identification	position, water depth	depth m	available current meter data 1980 1981 1982 1983
NEADS: site 1,N1 IfM: 264 in 1980 276 else	33°N 22°W 5300 m	125- 250 350- 550 630- 755 935-1160 ~1650 ~3000 ~4750	 continued
NEADS: site 11,N11 IfM: 277	34° 48'N 23° 05'W 5155 m	~ 250 ~ 550 ~ 800 ~1200 ~1650 ~3000 ~4700	
NEADS: site 12,N12 IfM: 278	31° 00'N 20° 30'W 4850 m	203 524 705 1139 1590 2974 4692	

Table 1: Available current meter data from NEADS sites 1, 11 and 12. Additional data from site 1, Jan to Dec 1977, are reported in Müller (1981).
----- no current vector.

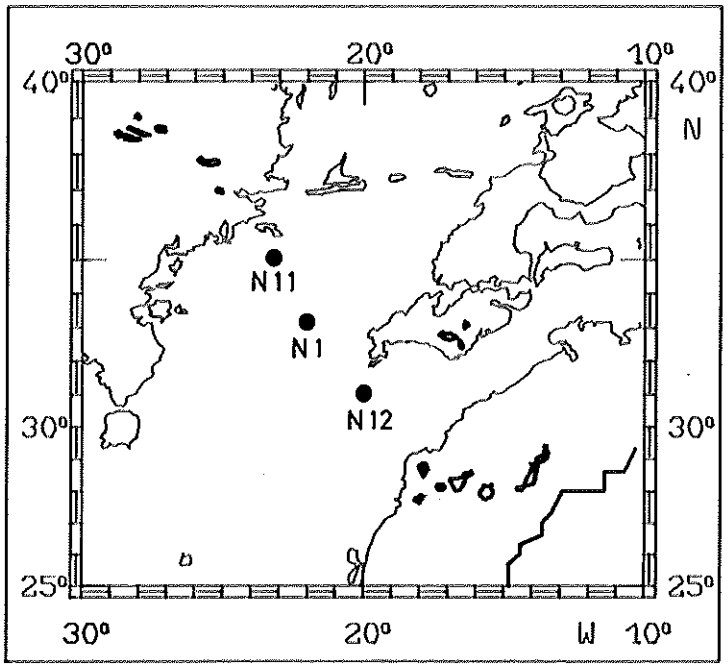


Fig. 1: Locations of NEADS mooring sites N1, N11 and N12.

Data processing

All current meters reported here are of Aanderaa type RCM-4/5 (Aanderaa, 1978). Recording intervals of these and of Aanderaa thermistor chains (50 m) were set to 60 minutes and 120 minutes, respectively. The data return was not too good due to two flooded new instruments RCM-5 which could not withstand pressure exceeding 3000 dbar, due to two rotors lost after few days in uppermost instruments and due to failures of the encoder system.

After reading the tapes all measurements were converted from raw data to physical units using calibration coefficients supplied by the manufacturer. Temperature and salinity values from the beginning and the end of the record were then compared with our CTD measurements and in a few cases (April 1983, depths >4000 m) with IGY data (Fuglister, 1960). It turned out that most salinity records inferred from conductivity measurements based on inductive cells have high offsets (~0.1) or even strong (nonlinear) trends. Although the CTD-data mentioned above have been used to eliminate an endpoint based linear trend, these salinities are not of high quality, and are recommended to be handled as such.

Temperature records showed no trends against CTDs and small offsets if any. In the deep ocean (> 3000 m) the high resolution range -2 to 6°C was used. Table 2 gives the expected quality of temperature and salinity data after correction. All corrections are noted in tables preceeding the graphs for each mooring.

	Temperature		Salinity
	-2 to 20°C	-2 to 6°C*	
resolution	20 mK	8 mK	0.05
precision	25 mK	12 mK	0.07
accuracy	50 mK	25 mK	0.20

* all meters in depths > 3000 m

Table 2: Quality of temperature and salinity data from Aanderaa current meters RCM-4/5.

High frequency analysis

Basic record statistics of unfiltered data are given as printouts. For definitions and formulas see Appendix 3.

Also, energy density spectra of these data are shown. Instead of east and north components of the velocity vector, rotary components u_+ and u_- in the definition applied by Willebrand et al. (1977) have been used to distinguish between the diurnal tide and the local inertial frequencies (c.f. also Gonella (1975)). The spectral estimates were calculated by Fast Fourier Transformation using detrended and not overlapping pieces of 512 data points. The resulting spectra were averaged in frequency range to get not more than 20 estimates per decade, and finally the spectra of all pieces were averaged. The frequency range thus is from 1/512 cph to 1/2 cph for current meters and from 1/512 cph to 1/4 cph for thermistor chains, where 256 data points were used per piece.

Low frequency analysis

The main aim of the research programme is to study low frequency motions. Therefore all time series were low pass filtered (Appendix 1) with filter amplitude responses of more than 98% for frequencies $\omega \leq 1/48$ cph. The cut-off thus lies in the frequency range where the energy density spectra show the typical gap (see fig. 2). From these data daily means were calculated which provide the basis for low frequency statistics and time series diagrams.

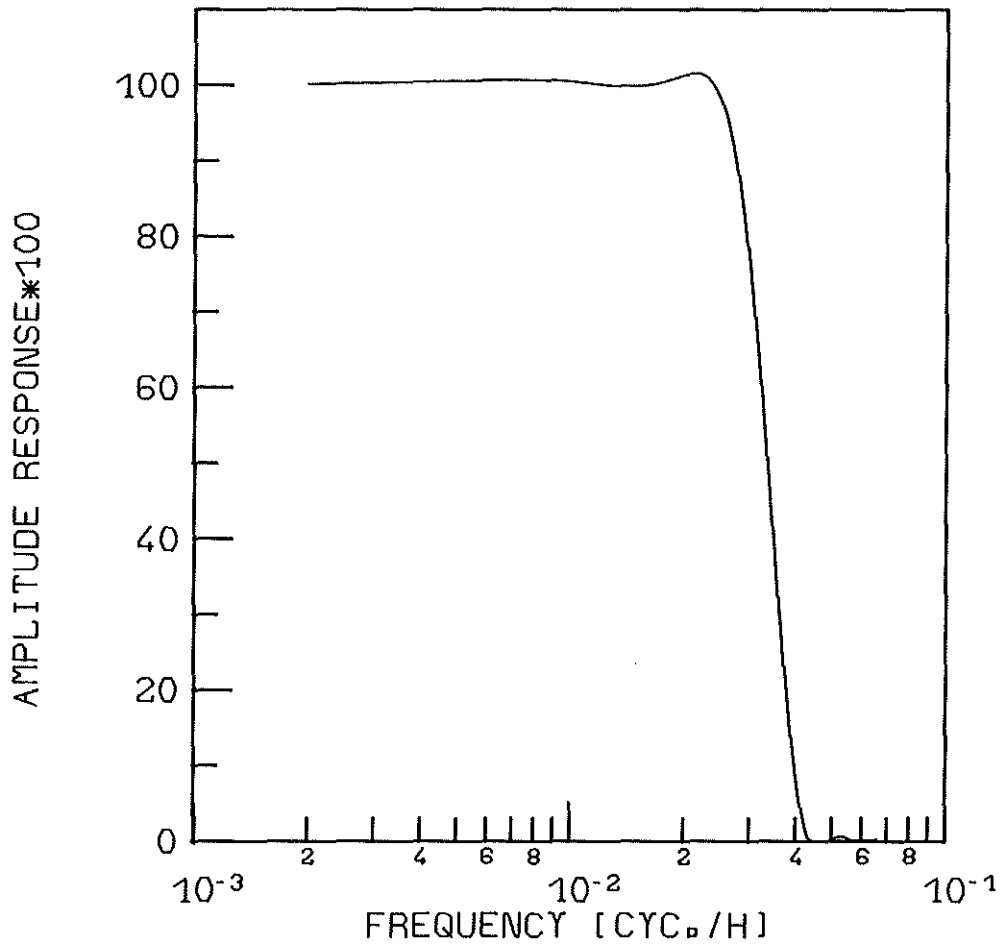


Fig. 2: Amplitude response of Lanczos low pass filter with 67 weights and half amplitude response at 1/30 cph.

Acknowledgements

Thanks go to the IfM mooring group, to the crews of F.S. METEOR and F.S. POSEIDON, and to the IfM data group, especially Frau Tietze.

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Graphical presentation: Overview (see also outfold)

The graphics are ordered according to moorings, starting with N1, Mar 82 - Apr 83, followed by N1, Apr 83 - Oct 83, and N 11, Mar 82 - Apr 83.

276300

N1

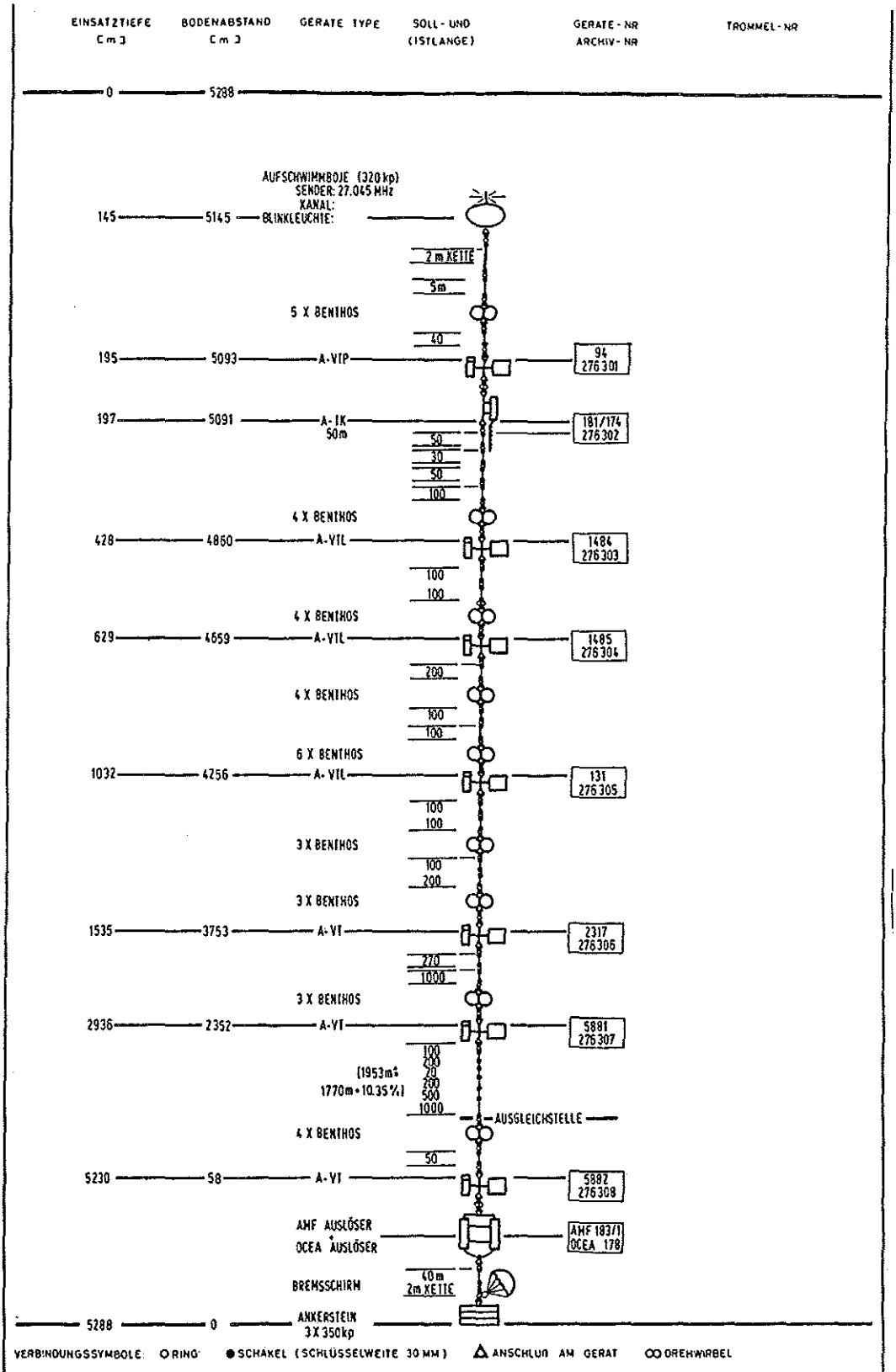
05 Mar 1982 - 14 Apr 1983

NEADS site 1, 33° 11.7'N, 21° 53.9'W, water depth 5288 m
IfM mooring No 276300
Deployed: 05 Mar 1982, Meteor 60/3
Recovered: 14 Apr 1983, Meteor 64/6
Start of record: 05 Mar 1982, 1600OZ.
End of record: 17 Apr 1983, 0800Z.
Recording interval: 60 min except thermistor-chains (120 min)
Time base check: ok with exceptions
276303: poor data from cycle 5922 on, no final flag
276305: 22 cycles interpolated

Identification	depth (m)	Parameters and corrections P	T	C	$\vec{u}$	ϕ	Remarks
276301	195	+2	x	-	x	x	Rotor lost after 345 cycles
302	197-247	-	x	-	-	-	11 thermistors
303	428	-	x	-0.09	x	x	Stop after 5840 cycles
304	629	-	x	x	x	x	C=C+(cycle-1)*1.17/9784-0.31
305	1032	-	0.5	-0.52	x	x	
306	1535	-	x	-	x	x	
307	2936						)
308	5230						) housings flooded

Symbols see page 97

Values for linear corrections are included.



BEMERKUNGEN:

VERANKERUNG NR.: 276-3

NR.: 2. AUSLEGUNG
(—DURCHGEFÜHRT—)
SCHIFF: FS "METEOR"
EXPEDITION „METEOR 60"
SEEGEBIET: NO-ATLANTIK φ = 33°11.67'N λ = 21°53.88'W
WASSERTIEFE: 5288 m
AUSLEGEDATUM 5.3.1982
AUFNAHMEDATUM 14.4.83

FILE: NEADS1 276301UVC/E2 MOORING ID: 276301 START-CYCLE: 1. STOP-CYCLE: 345. NUMBER OF VALUES: 345.

TIME RANGE: 5. 3.1982 16: 0: 0: 0/20. 3.1982 0: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.60000D+02 195 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	PRES	[DBAR]	0.1902E+03	0.2182E+03	0.2052E+03	0.2560E+00	0.2261E+02	0.4755E+01	-0.3682E+00	0.3619E+01
2	TEMP	[DEG.C]	0.1522E+02	0.1713E+02	0.1622E+02	0.1971E-01	0.1340E+00	0.3661E+00	-0.2204E-01	0.2552E+01
3	UC	[CM/S]	0.3095E+01	0.2883E+02	0.1673E+02	0.3107E+00	0.3330E+02	0.5771E+01	-0.3844E-01	0.2387E+01
4	VC	[CM/S]	-0.1065E+02	0.1777E+02	0.3414E+01	0.2837E+00	0.2777E+02	0.5270E+01	0.2536E-01	0.2790E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
3	4	0.1708E+02	0.3054E+02	0.5526E+01	0.2975E+00	78.47

FILE: NEADS1 276301 /E2 MOORING ID: 276301 START-CYCLE: 1. STOP-CYCLE: 9785. NUMBER OF VALUES: 9785.

TIME RANGE: 5. 3.1982 16: 0: 0: 0/17. 4.1983 8: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.60000D+02 195 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	PRES	[DBAR]	0.1902E+03	0.2500E+03	0.1983E+03	0.7976E-01	0.6224E+02	0.7889E+01	0.3223E+01	0.1647E+02
2	TEMP	[DEG.C]	0.1413E+02	0.1841E+02	0.1634E+02	0.7941E-02	0.6171E+00	0.7856E+00	0.1931E+00	0.3364E+01

FILE: NEADS1 276302 /ES MOORING ID: 276302 START-CYCLE: 1. STOP-CYCLE: 4893. NUMBER OF VALUES: 4893.

TIME RANGE: 5. 3.1982 16: 0: 0: 0/17. 4.1983 8: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.12000D+03 197 - 247 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.1415E+02	0.1834E+02	0.1620E+02	0.1093E-01	0.5840E+00	0.7642E+00	0.2325E+00	0.3444E+01
2	TEMP	[DEG.C]	0.1406E+02	0.1834E+02	0.1611E+02	0.1039E-01	0.5285E+00	0.7269E+00	0.9362E-01	0.3447E+01
3	TEMP	[DEG.C]	0.1394E+02	0.1832E+02	0.1599E+02	0.1029E-01	0.5183E+00	0.7199E+00	0.6930E-01	0.3469E+01
4	TEMP	[DEG.C]	0.1387E+02	0.1829E+02	0.1589E+02	0.9957E-02	0.4851E+00	0.6965E+00	-0.3655E-01	0.3378E+01
5	TEMP	[DEG.C]	0.1375E+02	0.1819E+02	0.1580E+02	0.9821E-02	0.4720E+00	0.6870E+00	-0.9127E-01	0.3254E+01
6	TEMP	[DEG.C]	0.1377E+02	0.1804E+02	0.1566E+02	0.9377E-02	0.4303E+00	0.6560E+00	-0.2358E+00	0.3079E+01
7	TEMP	[DEG.C]	0.1356E+02	0.1802E+02	0.1555E+02	0.9398E-02	0.4321E+00	0.6574E+00	-0.2896E+00	0.2768E+01
8	TEMP	[DEG.C]	0.1353E+02	0.1755E+02	0.1550E+02	0.9340E-02	0.4268E+00	0.6533E+00	-0.2891E+00	0.2724E+01
9	TEMP	[DEG.C]	0.1346E+02	0.1725E+02	0.1538E+02	0.9240E-02	0.4178E+00	0.6463E+00	-0.2953E+00	0.2705E+01
10	TEMP	[DEG.C]	0.1334E+02	0.1715E+02	0.1529E+02	0.9222E-02	0.4161E+00	0.6451E+00	-0.2660E+00	0.2712E+01
11	TEMP	[DEG.C]	0.1322E+02	0.1703E+02	0.1521E+02	0.9118E-02	0.4068E+00	0.6378E+00	-0.2877E+00	0.2699E+01

FILE: NEADS1 276303UVC/E2 MOORING ID: 276303 START-CYCLE: 1. STOP-CYCLE: 5840. NUMBER OF VALUES: 5840.

TIME RANGE: 5. 3.1982 16: 0: 0: 0/ 3.11.1982 23: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 428 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.1160E+02	0.1352E+02	0.1258E+02	0.4751E-02	0.1318E+00	0.3631E+00	-0.2309E+00	0.2629E+01
2	SAL	[PPT]	0.3514E+02	0.3594E+02	0.3568E+02	0.1100E-02	0.7061E-02	0.8403E-01	-0.2124E+01	0.8546E+01
3	SIGT	[ ]	0.2664E+02	0.2728E+02	0.2702E+02	0.1029E-02	0.6188E-02	0.7866E-01	-0.9562E+00	0.4901E+01
4	UC	[CM/S]	-0.8745E+01	0.2040E+02	0.5624E+01	0.5159E-01	0.1554E+02	0.3942E+01	0.2734E+00	0.3341E+01
5	VC	[CM/S]	-0.2256E+02	0.1580E+02	-0.8003E+00	0.8378E-01	0.4099E+02	0.6403E+01	-0.8417E+00	0.3635E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
4	5	0.5681E+01	0.2827E+02	0.5317E+01	0.6957E-01	98.10

FILE: NEADS1 276304UVC/XX MOORING ID: 276304 START-CYCLE: 1. STOP-CYCLE: 9785. NUMBER OF VALUES: 9785.

TIME RANGE: 5. 3.1982 16: 0: 0: 0/17. 4.1983 8: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 629 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.1039E+02	0.1167E+02	0.1102E+02	0.2470E-02	0.5972E-01	0.2444E+00	0.3709E+00	0.2174E+01
2	SAL	[PPT]	0.3528E+02	0.3565E+02	0.3542E+02	0.6932E-03	0.4702E-02	0.6857E-01	0.5629E+00	0.2264E+01
3	UC	[CM/S]	-0.1334E+02	0.1728E+02	0.3260E+01	0.4312E-01	0.1819E+02	0.4266E+01	-0.1474E+00	0.3152E+01
4	VC	[CM/S]	-0.2507E+02	0.1432E+02	-0.1398E+01	0.5664E-01	0.3140E+02	0.5603E+01	-0.5310E+00	0.3409E+01
5	SIGT	[ ]	0.2698E+02	0.2730E+02	0.2712E+02	0.5302E-03	0.2750E-02	0.5244E-01	0.1713E+00	0.2813E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
3	4	0.3547E+01	0.2480E+02	0.4980E+01	0.5034E-01	113.21

FILE: NEADS1 276305NEW/XX MOORING ID: 276305 START-CYCLE: 1. STOP-CYCLE: 9785. NUMBER OF VALUES: 9785.

TIME RANGE: 5. 3.1982 16: 0: 0: 0/17. 4.1983 8: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.60000D+02 1032 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.7859E+01	0.9454E+01	0.8601E+01	0.2644E-02	0.6840E-01	0.2615E+00	0.4150E+00	0.3281E+01
2	SAL	[PPT]	0.3530E+02	0.3590E+02	0.3562E+02	0.7101E-03	0.4934E-02	0.7024E-01	0.2880E+00	0.2898E+01
3	UC	[CM/S]	-0.1126E+02	0.1274E+02	0.1417E+01	0.3518E-01	0.1211E+02	0.3480E+01	-0.2671E+00	0.2981E+01
4	VC	[CM/S]	-0.1806E+02	0.1116E+02	-0.5933E+00	0.4165E-01	0.1700E+02	0.4124E+01	-0.3532E+00	0.2981E+01
5	SIGT	[ ]	0.2748E+02	0.2787E+02	0.2769E+02	0.3241E-03	0.1028E-02	0.3206E-01	-0.2564E+00	0.4084E+01

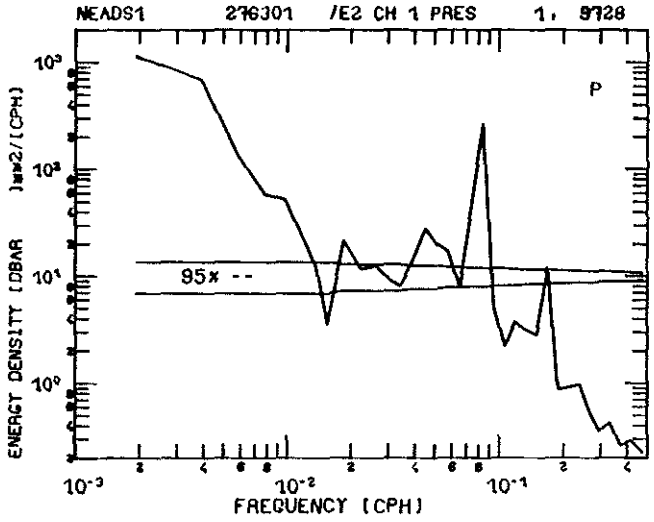
PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
3	4	0.1537E+01	0.1456E+02	0.3815E+01	0.3857E-01	112.71

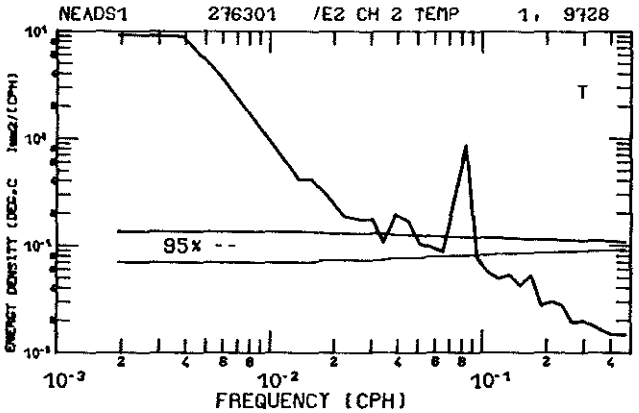
FILE: NEADS1 276306UVC/E5 MOORING ID: 276306 START-CYCLE: 1. STOP-CYCLE: 9785. NUMBER OF VALUES: 9785.

TIME RANGE: 5. 3.1982 16: 0: 0: 0/17. 4.1983 8: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.60000D+02 1535 m

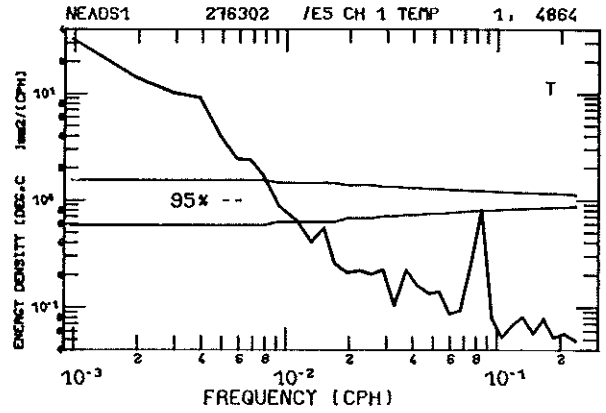
	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.4830E+01	0.5757E+01	0.5384E+01	0.1774E-02	0.3078E-01	0.1754E+00	-0.3508E+00	0.2479E+01
2	UC	[CM/S]	-0.8541E+01	0.1074E+02	0.1870E+00	0.2668E-01	0.6966E+01	0.2640E+01	-0.7844E-01	0.3185E+01
3	VC	[CM/S]	-0.1081E+02	0.1098E+02	-0.3350E+00	0.3136E-01	0.9622E+01	0.3102E+01	0.1566E+00	0.2963E+01

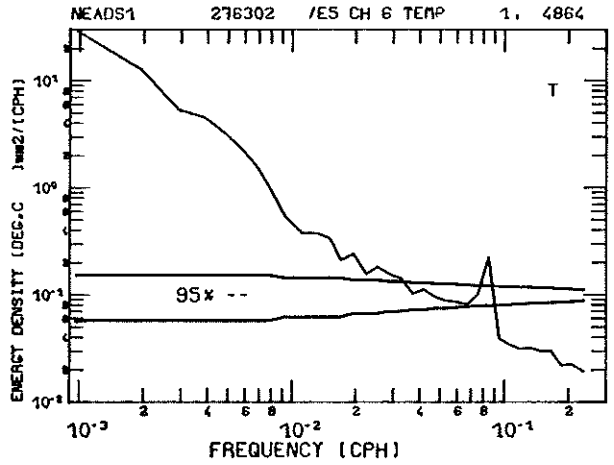
PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
2	3	0.3837E+00	0.8295E+01	0.2880E+01	0.2912E-01	150.82

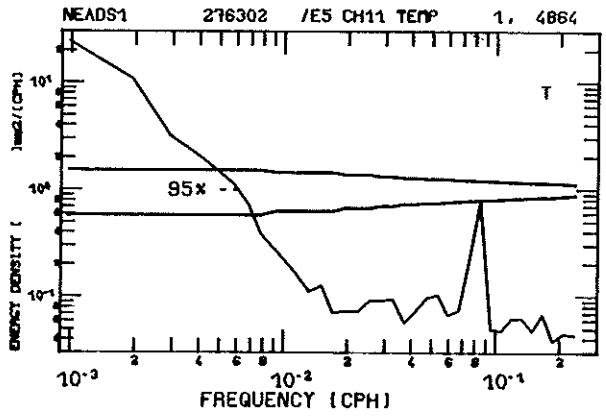

NEADS1 276301 /E2 CH 1 PRES 1, 9728
P
95% --
ENERGY DENSITY (DBAR
FREQUENCY (CPH)


NEADS1 276301 /E2 CH 2 TEMP 1, 9728
T
95% --
FREQUENCY (CPH)

276301,195m



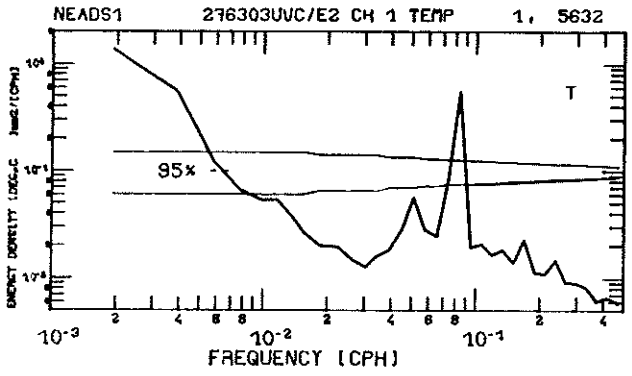


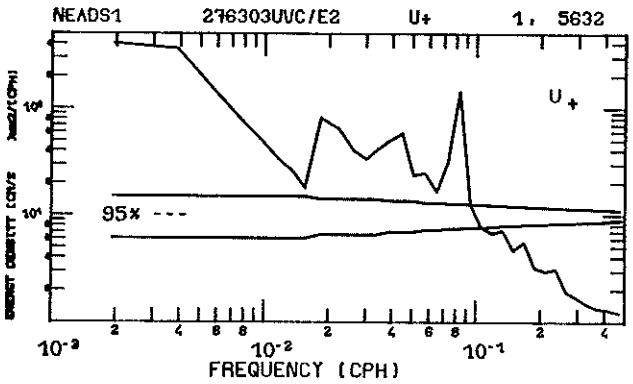


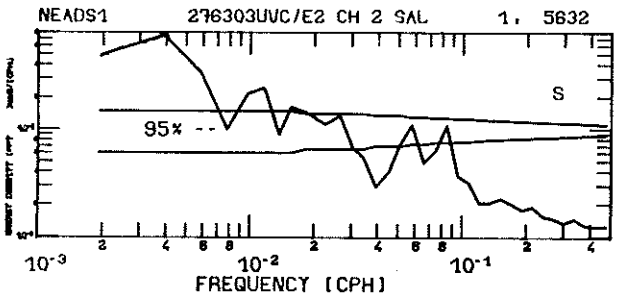
276302,197m

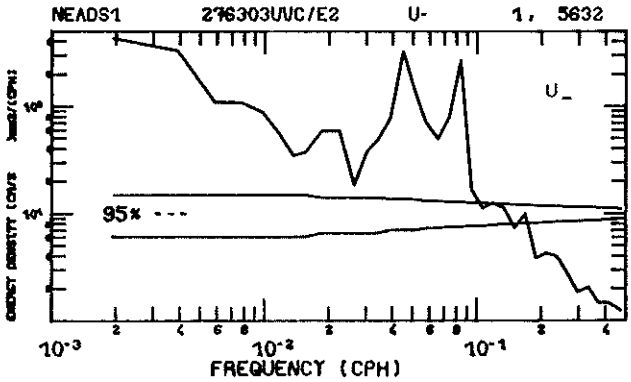
222m

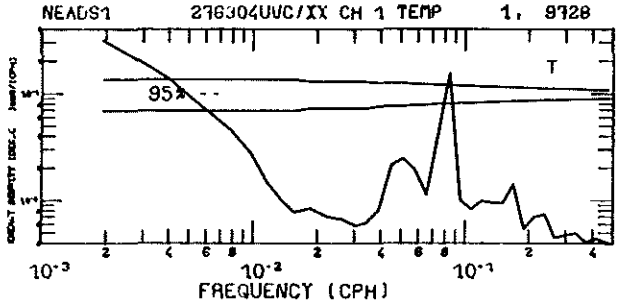
247m

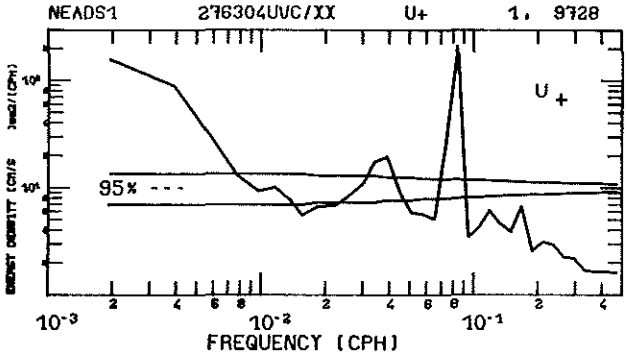

NEADS1 276303UVC/E2 CH 1 TEMP 1, 5632
T
95% --
FREQUENCY [CPH]

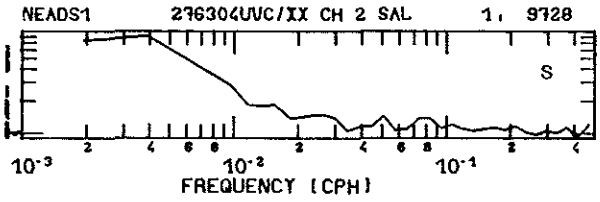

NEADS1 276303UVC/E2 U+ 1, 5632
U+
95% ---
FREQUENCY [CPH]

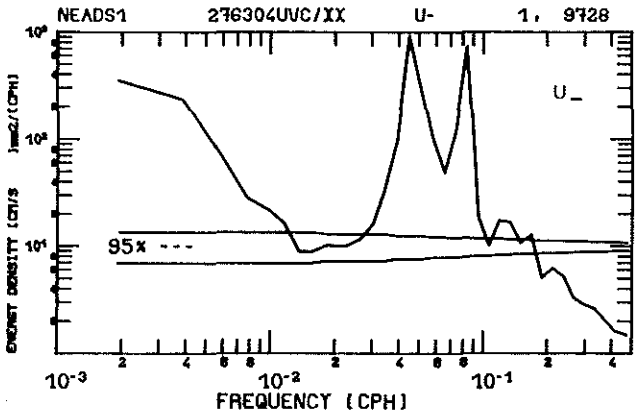

NEADS1 276303UVC/E2 CH 2 SAL 1, 5632
S
95% --
FREQUENCY [CPH]

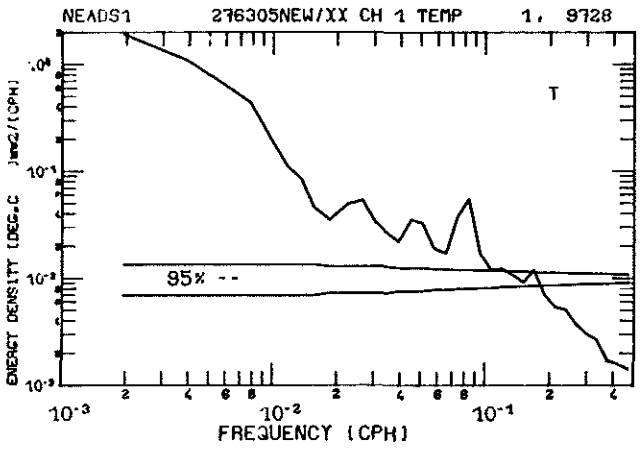

NEADS1 276303UVC/E2 U- 1, 5632
U-
95% ---
FREQUENCY [CPH]

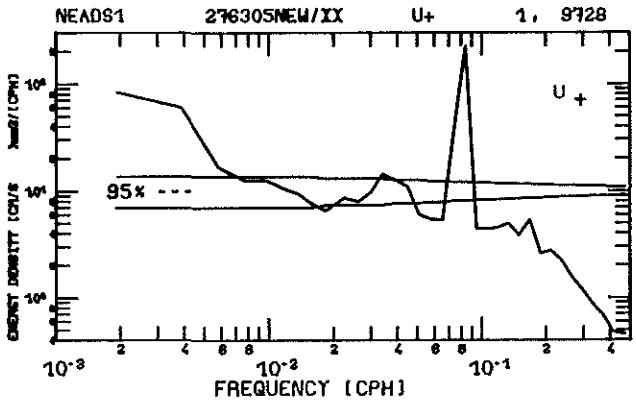

NEADS1 276304UUC/XX CH 1 TEMP 1, 9728
T
95% - -
10^{-3}
10^{-2}
10^{-1}
FREQUENCY (CPH)

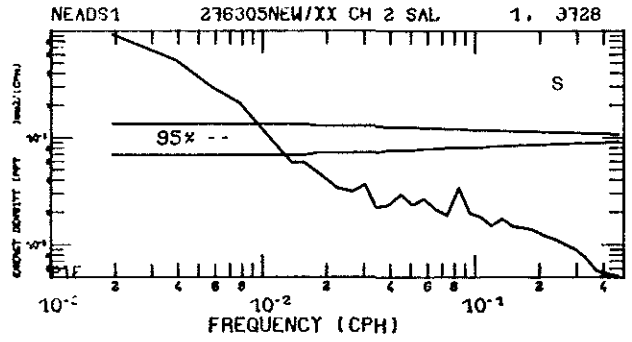

NEADS1 276304UUC/XX U+ 1, 9728
U_+
95% - - -
10^{-3}
10^{-2}
10^{-1}
FREQUENCY (CPH)

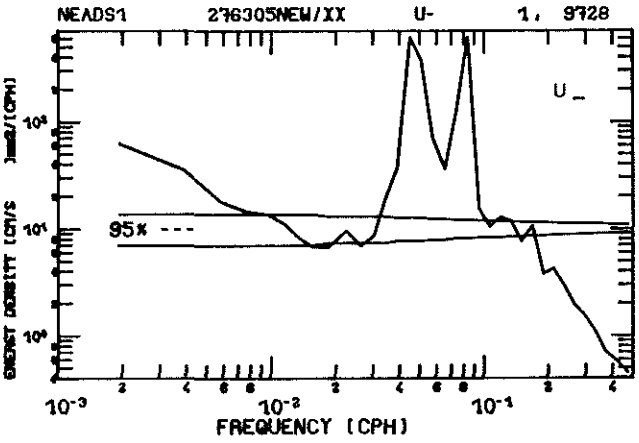

NEADS1 276304UUC/XX CH 2 SAL 1, 9728
S
10^{-3}
10^{-2}
10^{-1}
FREQUENCY (CPH)

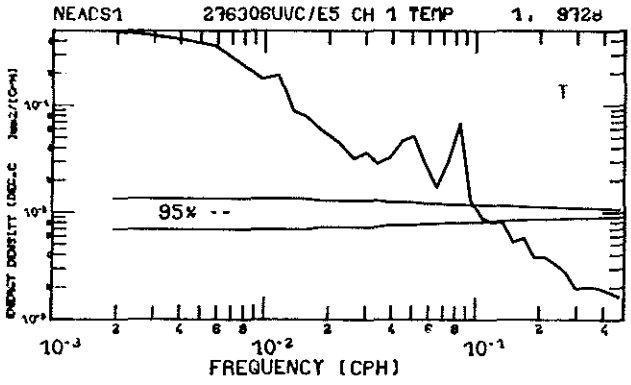

NEADS1 276304UUC/XX U- 1, 9728
U_-
95% - - -
10^{-3}
10^{-2}
10^{-1}
FREQUENCY (CPH)

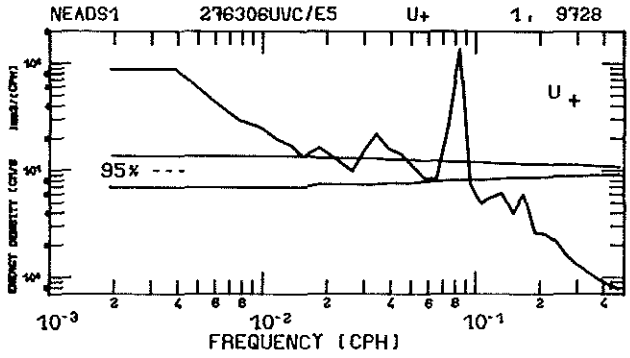

NEADS1 276305NEW/XX CH 1 TEMP 1, 9728
T
95% --
FREQUENCY (CPH)

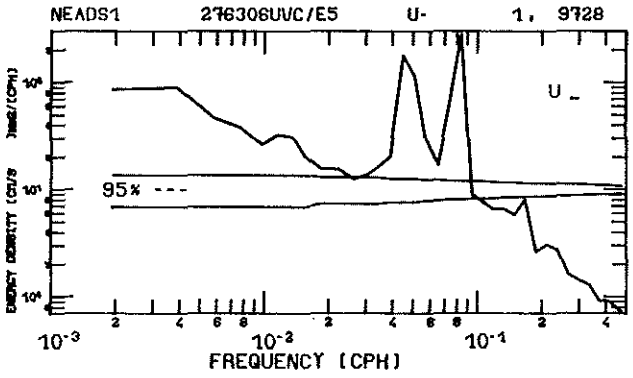

NEADS1 276305NEW/XX U+ 1, 9728
U +
95% ---
FREQUENCY (CPH)


NEADS1 276305NEW/XX CH 2 SAL 1, 9728
S
95% --
FREQUENCY (CPH)


NEADS1 276305NEW/XX U- 1, 9728
U -
95% ---
FREQUENCY (CPH)


NEADS1 276306UVC/E5 CH 1 TEMP 1, 9728
T
95% --
10-3
10-2
10-1
FREQUENCY (CPH)


NEADS1 276306UVC/E5 U+ 1, 9728
U +
95% ---
10-3
10-2
10-1
FREQUENCY (CPH)


NEADS1 276306UVC/E5 U- 1, 9728
U -
95% ---
10-3
10-2
10-1
FREQUENCY (CPH)

FILE: NEADS1 276301/A 024 MOORING ID: 276301 START-CYCLE: 1. STOP-CYCLE: 8. NUMBER OF VALUES: 8.

TIME RANGE: 8. 3.1982 21:30: 0: 0/15. 3.1982 21:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.14400D+04 195 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STDDEV	SKEWNESS	KURTOSIS
1	PRES	[DBAR]	0.2052E+03	0.2073E+03	0.2066E+03	0.2892E+00	0.6689E+00	0.8178E+00	-0.8334E+00	0.1942E+01
2	TEMP	[DEG.C]	0.1592E+02	0.1655E+02	0.1620E+02	0.7185E-01	0.4130E-01	0.2032E+00	0.2519E+00	0.2056E+01
3	UC	[CM/S]	0.1703E+02	0.2051E+02	0.1880E+02	0.3906E+00	0.1221E+01	0.1105E+01	-0.1442E-01	0.1898E+01
4	VC	[CM/S]	-0.2397E+00	0.5790E+01	0.3003E+01	0.6937E+00	0.3850E+01	0.1962E+01	-0.5008E+00	0.2076E+01

	VARIABLES		COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	PRES	2 TEMP	-0.7212E-02	-0.4339E-01	0.1900E+04	0.4359E+02	0.1541E+02
1	PRES	3 UC	-0.1404E+00	-0.1553E+00	0.5141E+05	0.2267E+03	0.8016E+02
1	PRES	4 VC	0.4616E+00	0.2876E+00	0.1646E+06	0.4057E+03	0.1434E+03
2	TEMP	3 UC	-0.1662E+00	-0.7403E+00	0.2350E+03	0.1533E+02	0.5419E+01
2	TEMP	4 VC	-0.1437E+00	-0.3603E+00	0.1012E+04	0.3182E+02	0.1125E+02
3	UC	4 VC	0.4186E+00	0.1931E+00	0.1396E+04	0.3736E+02	0.1321E+02

	PAIR	VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
3	4	0.1903E+02	0.2535E+01	0.1592E+01	0.5630E+00	80.92

FILE: NEADS1 276301/A /E1 MOORING ID: 276301 START-CYCLE: 1. STOP-CYCLE: 402. NUMBER OF VALUES: 402.

TIME RANGE: 8. 3.1982 21:30: 0: 0/13. 4.1983 21:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.14400D+04 195 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STDDEV	SKEWNESS	KURTOSIS
1	PRES	[DBAR]	0.1920E+03	0.2458E+03	0.1983E+03	0.3802E+00	0.5810E+02	0.7622E+01	0.3319E+01	0.1693E+02
2	TEMP	[DEG.C]	0.1442E+02	0.1828E+02	0.1633E+02	0.3784E-01	0.5757E+00	0.7588E+00	0.1431E+00	0.3346E+01

	VARIABLES		COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	PRES	2 TEMP	-0.2164E+01	-0.3741E+00	0.2297E+05	0.1516E+03	0.7559E+01

FILE: NEADS1 276302/A 012 MOORING ID: 276302 START-CYCLE: 1. STOP-CYCLE: 402. NUMBER OF VALUES: 402.

TIME RANGE: 8. 3.1982 21: 0: 0: 0/13. 4.1983 21: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.14400D+04 197-247 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.1437E+02	0.1819E+02	0.1620E+02	0.3672E-01	0.5422E+00	0.7363E+00	0.1720E+00	0.3401E+01
2	TEMP	[DEG.C]	0.1427E+02	0.1815E+02	0.1610E+02	0.3513E-01	0.4961E+00	0.7043E+00	0.3468E-01	0.3346E+01
3	TEMP	[DEG.C]	0.1417E+02	0.1809E+02	0.1599E+02	0.3475E-01	0.4853E+00	0.6967E+00	-0.7828E-02	0.3297E+01
4	TEMP	[DEG.C]	0.1410E+02	0.1798E+02	0.1589E+02	0.3369E-01	0.4564E+00	0.6756E+00	-0.1104E+00	0.3169E+01
5	TEMP	[DEG.C]	0.1402E+02	0.1795E+02	0.1580E+02	0.3314E-01	0.4416E+00	0.6645E+00	-0.1588E+00	0.3142E+01
6	TEMP	[DEG.C]	0.1393E+02	0.1781E+02	0.1566E+02	0.3220E-01	0.4168E+00	0.6456E+00	-0.2529E+00	0.3066E+01
7	TEMP	[DEG.C]	0.1381E+02	0.1720E+02	0.1555E+02	0.3187E-01	0.4083E+00	0.6390E+00	-0.3347E+00	0.2690E+01
8	TEMP	[DEG.C]	0.1377E+02	0.1701E+02	0.1549E+02	0.3165E-01	0.4026E+00	0.6345E+00	-0.3327E+00	0.2668E+01
9	TEMP	[DEG.C]	0.1365E+02	0.1688E+02	0.1537E+02	0.3129E-01	0.3935E+00	0.6273E+00	-0.3338E+00	0.2665E+01
10	TEMP	[DEG.C]	0.1358E+02	0.1681E+02	0.1529E+02	0.3127E-01	0.3931E+00	0.6270E+00	-0.3028E+00	0.2661E+01
11	TEMP	[DEG.C]	0.1351E+02	0.1659E+02	0.1521E+02	0.3089E-01	0.3836E+00	0.6193E+00	-0.3309E+00	0.2636E+01

FILE: NEADS1 276303/A 024 MOORING ID: 276303 START-CYCLE: 1. STOP-CYCLE: 237. NUMBER OF VALUES: 237.

TIME RANGE: 8. 3.1982 21:30: 0: 0/30.10.1982 21:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.14400D+04 428 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.1178E+02	0.1323E+02	0.1256E+02	0.2272E-01	0.1223E+00	0.3497E+00	-0.3472E+00	0.2473E+01
2	SAL	[PPT]	0.3539E+02	0.3576E+02	0.3568E+02	0.4197E-02	0.4174E-02	0.6461E-01	-0.2168E+01	0.7982E+01
3	SIGT	[ ]	0.2677E+02	0.2715E+02	0.2702E+02	0.4339E-02	0.4461E-02	0.6679E-01	-0.7917E+00	0.4557E+01
4	UC	[CM/S]	-0.3042E+01	0.1264E+02	0.5518E+01	0.1848E+00	0.8094E+01	0.2845E+01	0.3063E+00	0.3177E+01
5	VC	[CM/S]	-0.1914E+02	0.8593E+01	-0.6581E+00	0.3707E+00	0.3256E+02	0.5706E+01	-0.1104E+01	0.4070E+01

	VARIABLES		COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	TEMP	2 SAL	0.9282E-02	0.4108E+00	0.1647E+03	0.1283E+02	0.8337E+00
1	TEMP	3 SIGT	-0.1702E-01	-0.7285E+00	0.7860E+02	0.8866E+01	0.5759E+00
1	TEMP	4 UC	-0.4555E+00	-0.4578E+00	0.1213E+04	0.3483E+02	0.2262E+01
1	TEMP	5 VC	-0.2692E+00	-0.1349E+00	0.5051E+04	0.7107E+02	0.4617E+01
2	SAL	3 SIGT	0.1402E-02	0.3249E+00	0.1137E+02	0.3373E+01	0.2191E+00
2	SAL	4 UC	-0.4775E-01	-0.2598E+00	0.1028E+05	0.1014E+03	0.6586E+01
2	SAL	5 VC	0.1950E+00	0.5290E+00	0.4129E+05	0.2032E+03	0.1320E+02
3	SIGT	4 UC	0.5302E-01	0.2790E+00	0.5927E+04	0.7698E+02	0.5001E+01
3	SIGT	5 VC	0.2053E+00	0.5386E+00	0.2373E+05	0.1540E+03	0.1001E+02
4	UC	5 VC	0.1486E+01	0.9150E-01	0.1587E+04	0.3984E+02	0.2588E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
4	5	0.5557E+01	0.2033E+02	0.4509E+01	0.2929E+00	96.80

FILE: NEADS1 276304/A 024 MOORING ID: 276304 START-CYCLE: 1. STOP-CYCLE: 402. NUMBER OF VALUES: 402.

TIME RANGE: 8. 3.1982 21:30: 0: 0/13. 4.1983 21:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.14400D+04 629 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.1054E+02	0.1147E+02	0.1102E+02	0.1162E-01	0.5425E-01	0.2329E+00	0.4217E+00	0.1994E+01
2	SAL	[PPT]	0.3532E+02	0.3556E+02	0.3542E+02	0.3159E-02	0.4013E-02	0.6335E-01	0.6912E+00	0.2097E+01
3	UC	[CM/S]	-0.6404E+01	0.9969E+01	0.3252E+01	0.1170E+00	0.5501E+01	0.2345E+01	-0.1304E+00	0.3735E+01
4	VC	[CM/S]	-0.1629E+02	0.7032E+01	-0.1396E+01	0.2263E+00	0.2041E+02	0.4518E+01	-0.1063E+01	0.4683E+01
5	SIGT	[ ]	0.2703E+02	0.2723E+02	0.2712E+02	0.2370E-02	0.2259E-02	0.4753E-01	0.1881E+00	0.2692E+01

	VARIABLES		COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	TEMP	2 SAL	0.6944E-02	0.4706E+00	0.7413E+02	0.8610E+01	0.4294E+00
1	TEMP	3 UC	-0.3188E+00	-0.5836E+00	0.6483E+03	0.2546E+02	0.1270E+01
1	TEMP	4 VC	0.6238E-01	0.5928E-01	0.2402E+04	0.4901E+02	0.2444E+01
1	TEMP	5 SIGT	-0.4550E-02	-0.4111E+00	0.3749E+02	0.6123E+01	0.3054E+00
2	SAL	3 UC	-0.2525E-01	-0.1700E+00	0.6904E+04	0.8309E+02	0.4144E+01
2	SAL	4 VC	0.2293E-01	0.8012E-01	0.2556E+05	0.1599E+03	0.7974E+01
2	SAL	5 SIGT	0.1839E-02	0.6109E+00	0.9320E+01	0.3053E+01	0.1523E+00
3	UC	4 VC	0.5151E+00	0.4861E-01	0.5234E+03	0.2288E+02	0.1141E+01
3	UC	5 SIGT	0.3886E-01	0.3486E+00	0.4056E+04	0.6368E+02	0.3176E+01
4	VC	5 SIGT	0.6811E-02	0.3172E-01	0.1502E+05	0.1225E+03	0.6112E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
3	4	0.3539E+01	0.1296E+02	0.3600E+01	0.1795E+00	113.23

FILE: NEADS1 276305/A 024 MOORING ID: 276305 START-CYCLE: 1. STOP-CYCLE: 402. NUMBER OF VALUES: 402.

TIME RANGE: 8. 3.1982 21:30: 0: 0/13. 4.1983 21:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.14400D+04 1032 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.7951E+01	0.9263E+01	0.8602E+01	0.1266E-01	0.6448E-01	0.2539E+00	0.4185E+00	0.3222E+01
2	SAL	[PPT]	0.3539E+02	0.3580E+02	0.3562E+02	0.3287E-02	0.4344E-02	0.6591E-01	0.3248E+00	0.2685E+01
3	UC	[CM/S]	-0.1724E+01	0.5124E+01	0.1420E+01	0.6308E-01	0.1600E+01	0.1265E+01	0.1068E+00	0.2403E+01
4	VC	[CM/S]	-0.1066E+02	0.4103E+01	-0.5927E+00	0.1387E+00	0.7728E+01	0.2780E+01	-0.1048E+01	0.4550E+01
5	SIGT	[ ]	0.2756E+02	0.2775E+02	0.2769E+02	0.1286E-02	0.6645E-03	0.2578E-01	-0.3344E+00	0.3610E+01

	VARIABLES		COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	TEMP	2 SAL	0.1455E-01	0.8692E+00	0.9123E+02	0.9552E+01	0.4764E+00
1	TEMP	3 UC	0.6860E-01	0.2136E+00	0.1200E+03	0.1095E+02	0.5463E+00
1	TEMP	4 VC	0.6191E-01	0.8770E-01	0.5774E+03	0.2403E+02	0.1198E+01
1	TEMP	5 SIGT	0.1121E-02	0.1712E+00	0.5005E+02	0.7075E+01	0.3529E+00
2	SAL	3 UC	0.3481E-01	0.4177E+00	0.2033E+04	0.4509E+02	0.2249E+01
2	SAL	4 VC	0.3310E-02	0.1807E-01	0.9823E+04	0.9911E+02	0.4943E+01
2	SAL	5 SIGT	0.1080E-02	0.6358E+00	0.6302E+01	0.2510E+01	0.1252E+00
3	UC	4 VC	0.4280E+00	0.1217E+00	0.4532E+02	0.6732E+01	0.3358E+00
3	UC	5 SIGT	0.1630E-01	0.4998E+00	0.1227E+04	0.3504E+02	0.1747E+01
4	VC	5 SIGT	-0.6638E-02	-0.9263E-01	0.5932E+04	0.7702E+02	0.3841E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
3	4	0.1539E+01	0.4664E+01	0.2160E+01	0.1077E+00	112.66

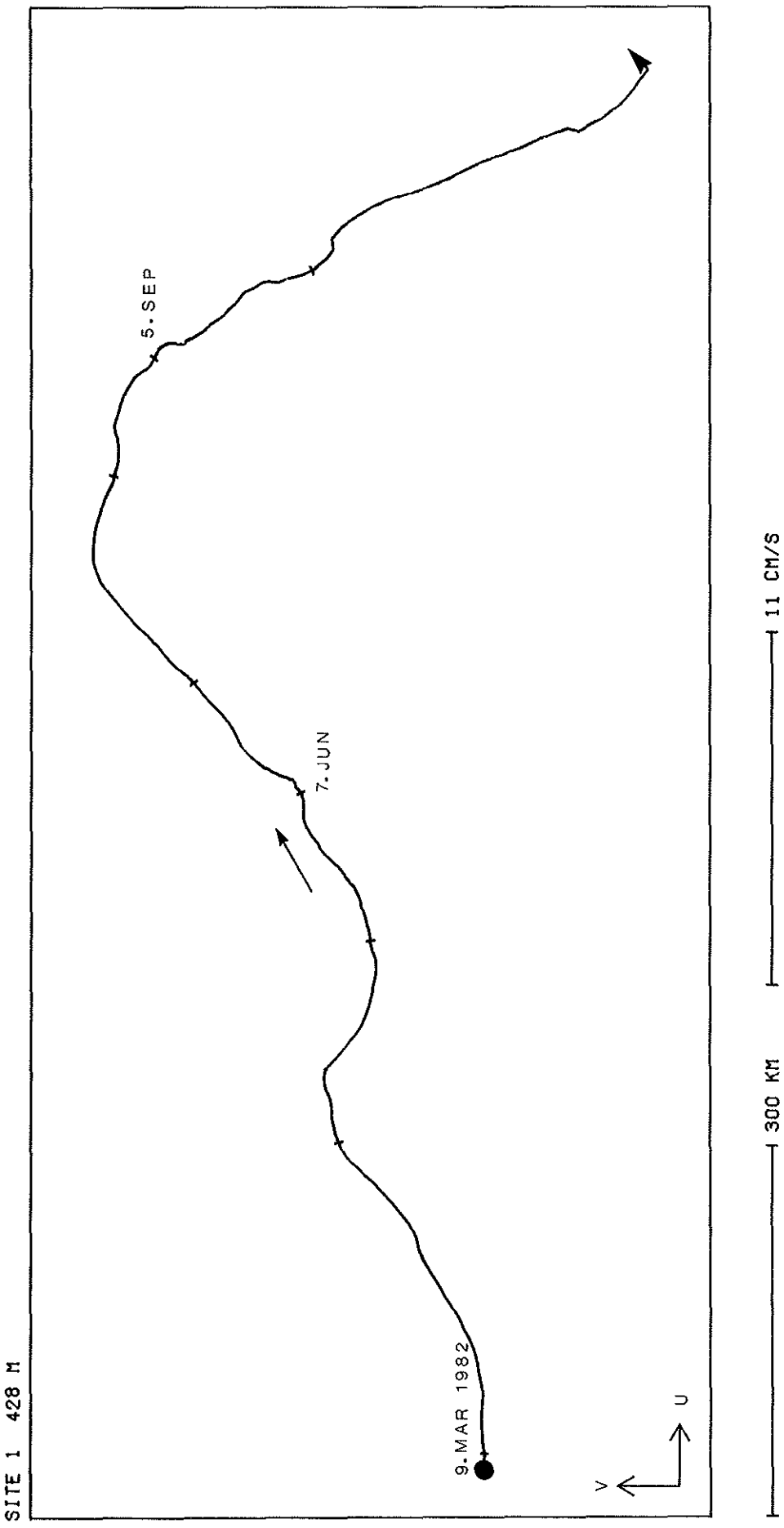
FILE: NEADS1 276306/A 024 MOORING ID: 276306 START-CYCLE: 1. STOP-CYCLE: 402. NUMBER OF VALUES: 402.

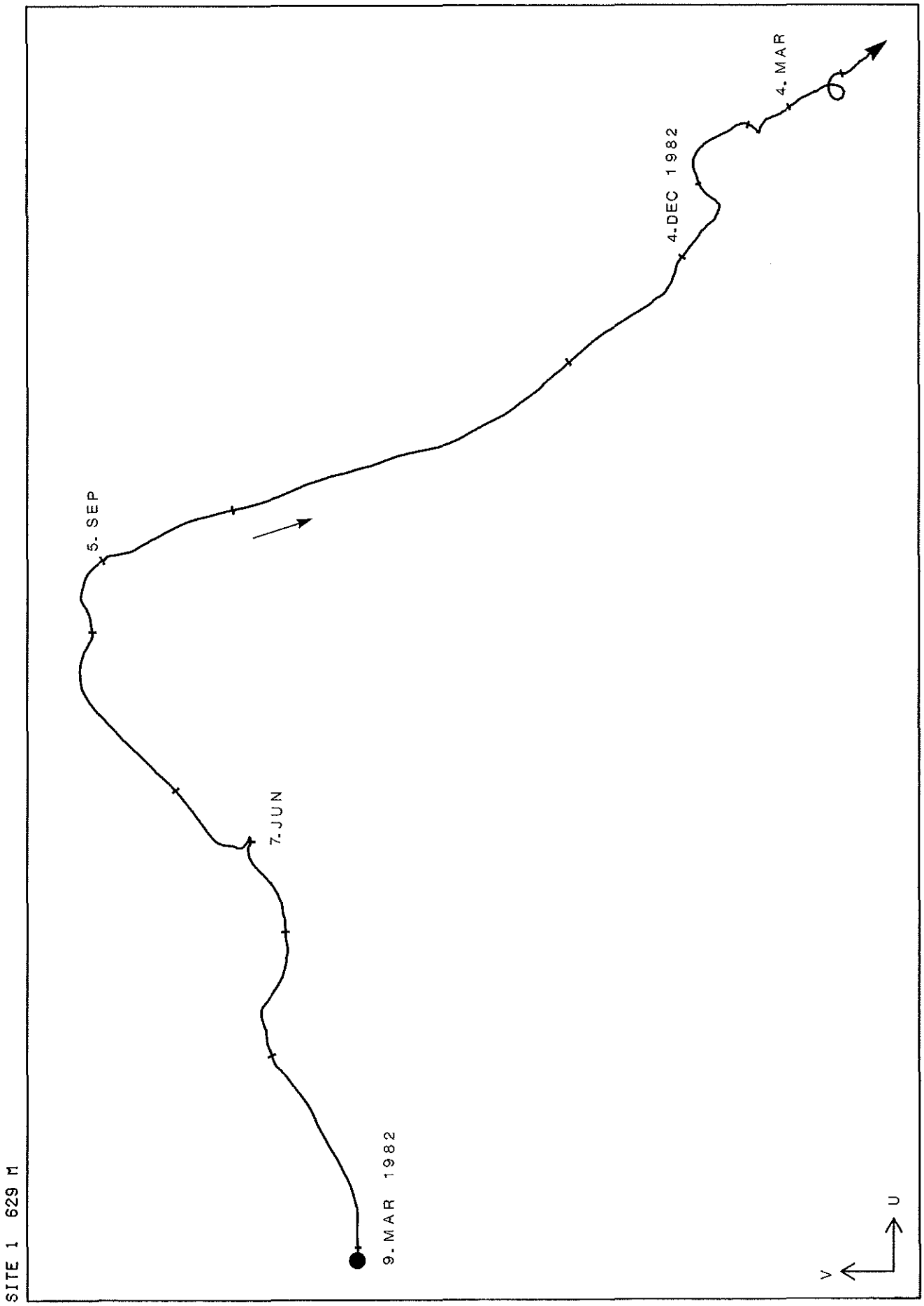
TIME RANGE: 8. 3.1982 21:30: 0: 0/13. 4.1983 21:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.14400D+04 1535 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.4879E+01	0.5664E+01	0.5385E+01	0.8018E-02	0.2585E-01	0.1608E+00	-0.2943E+00	0.2645E+01
2	UC	[CM/S]	-0.3072E+01	0.3870E+01	0.1753E+00	0.6703E-01	0.1806E+01	0.1344E+01	0.1060E-01	0.2724E+01
3	VC	[CM/S]	-0.5202E+01	0.5619E+01	-0.3398E+00	0.1047E+00	0.4406E+01	0.2099E+01	0.1218E+00	0.2945E+01

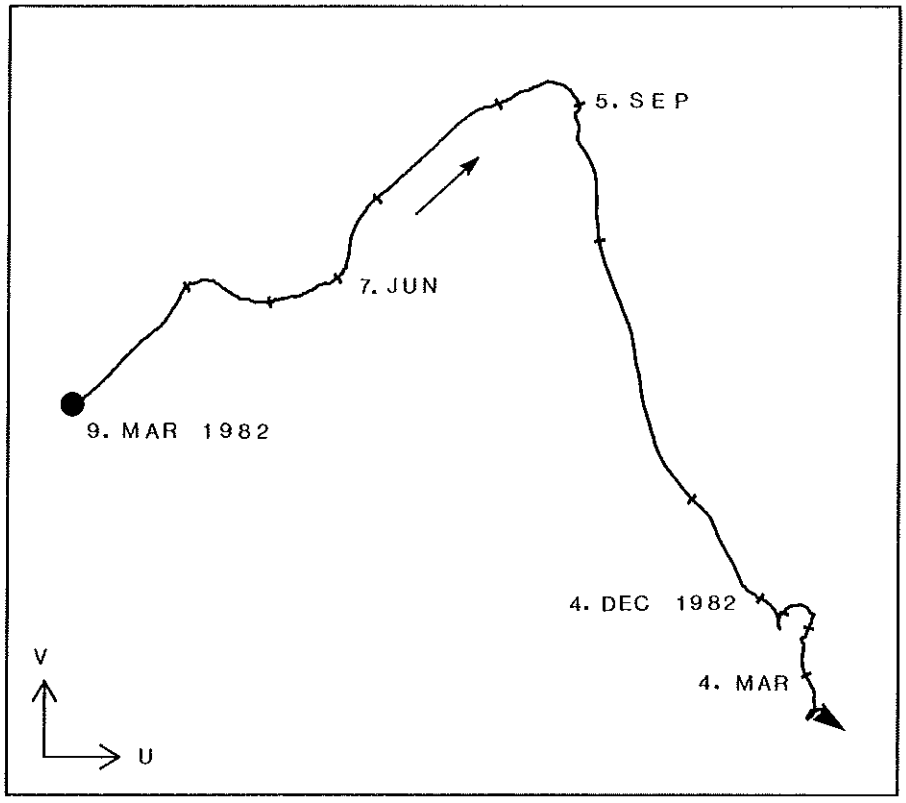
	VARIABLES		COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	TEMP	2 UC	0.3817E-01	0.1767E+00	0.5239E+02	0.7238E+01	0.3610E+00
1	TEMP	3 VC	0.1952E-01	0.5785E-01	0.1257E+03	0.1121E+02	0.5591E+00
2	UC	3 VC	-0.9163E-01	-0.3249E-01	0.5204E+01	0.2281E+01	0.1138E+00

	PAIR	VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
2	3	0.3823E+00	0.3106E+01	0.1762E+01	0.8790E-01	152.71


SITE 1 428 M
5.SEP
7.JUN
9.MAR 1982
V
U
300 KM
11 CM/S

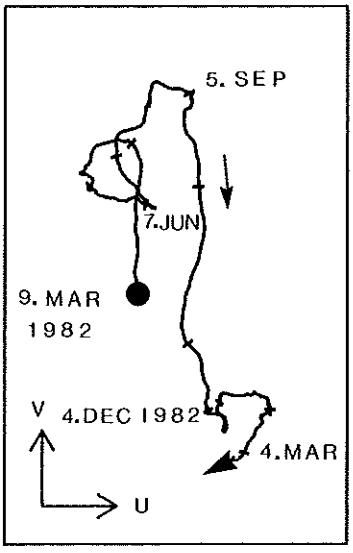

SITE 1 629 M
9.MAR 1982
7.JUN
5.SEP
4.DEC 1982
4.MAR
V
U
300 KM
11 CM/S

SITE 1 1032 M

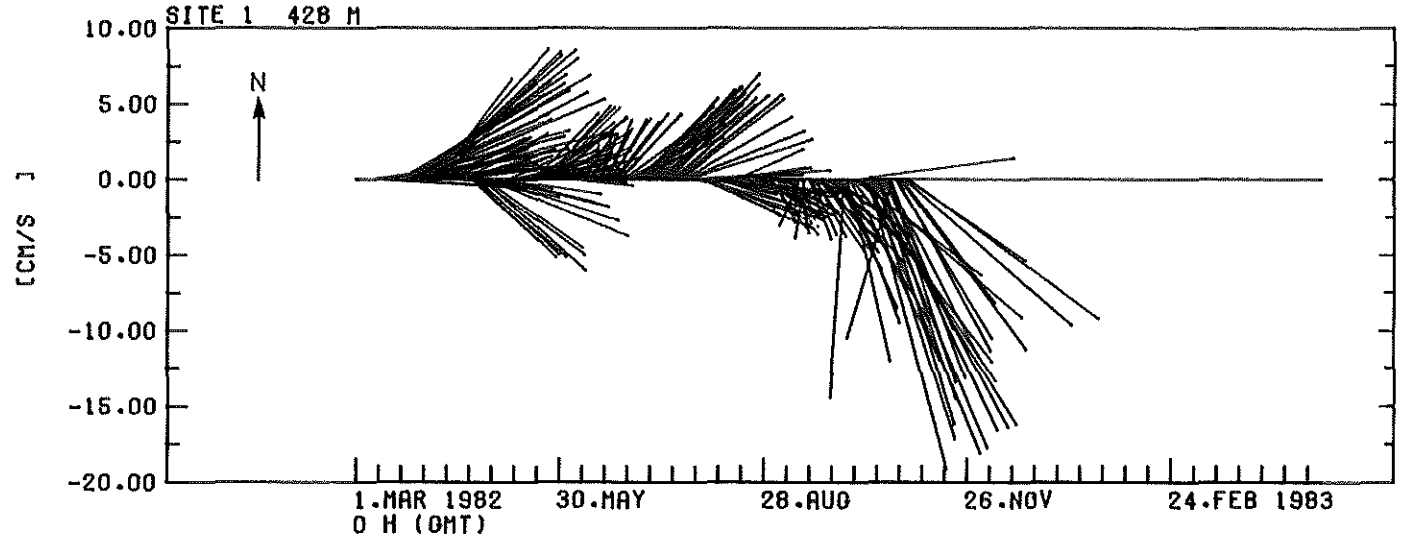


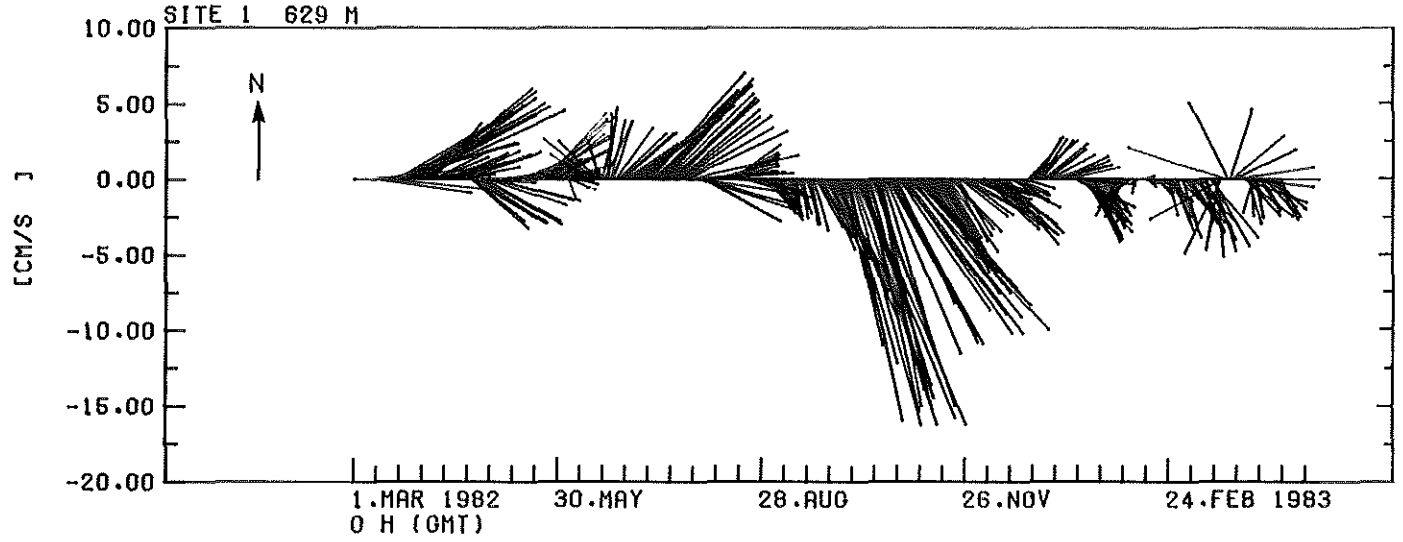
150 KM 5 CM/S

SITE 1 1535 M



50 KM 1 CM/S


SITE 1 428 M
10.00
5.00
0.00
-5.00
-10.00
-15.00
-20.00
[CM/S]
N
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)


SITE 1 629 M
10.00
5.00
0.00
-5.00
-10.00
-15.00
-20.00
[CM/S]
N
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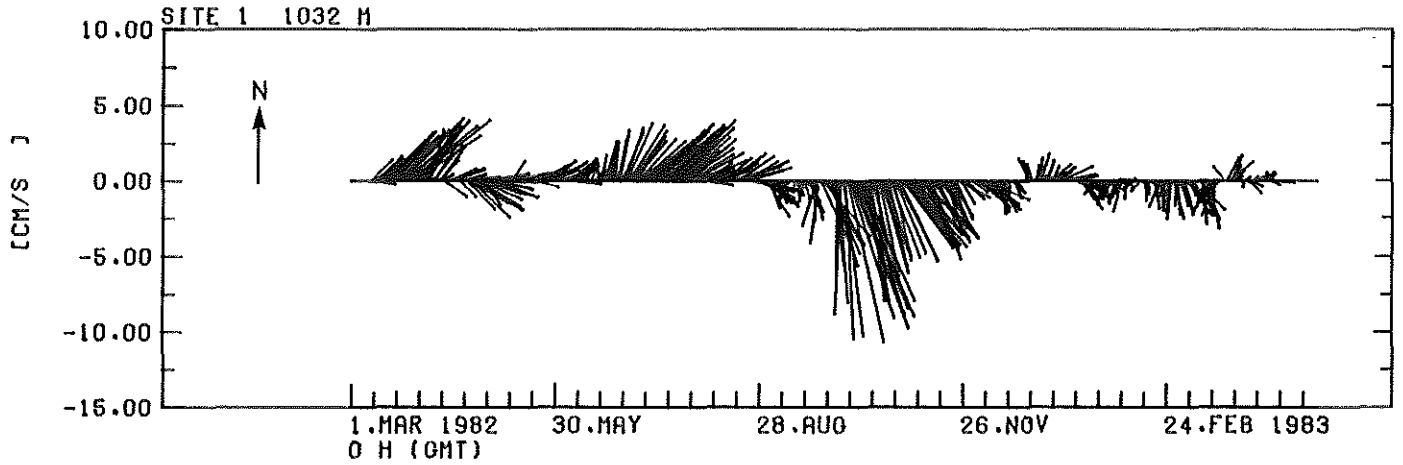
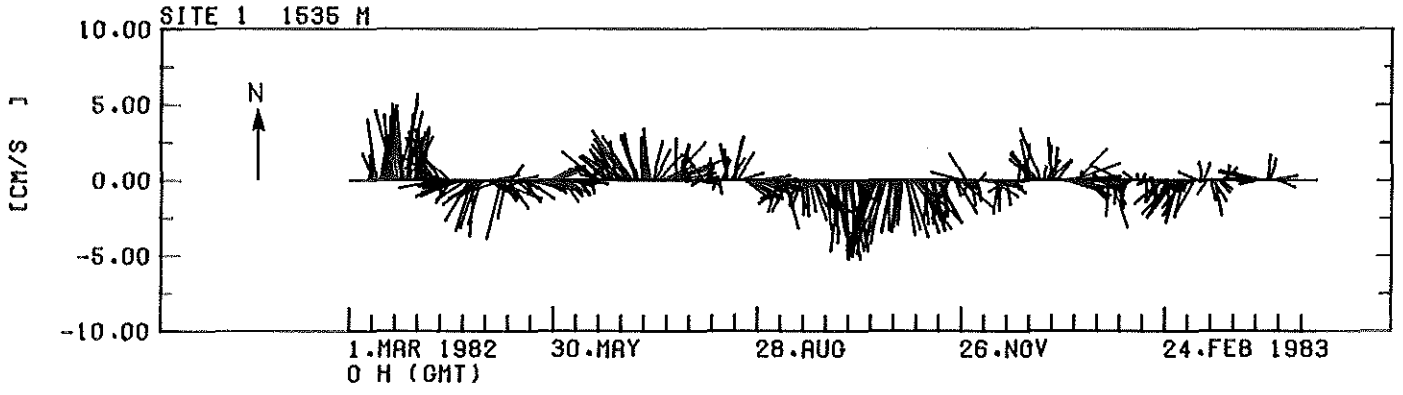
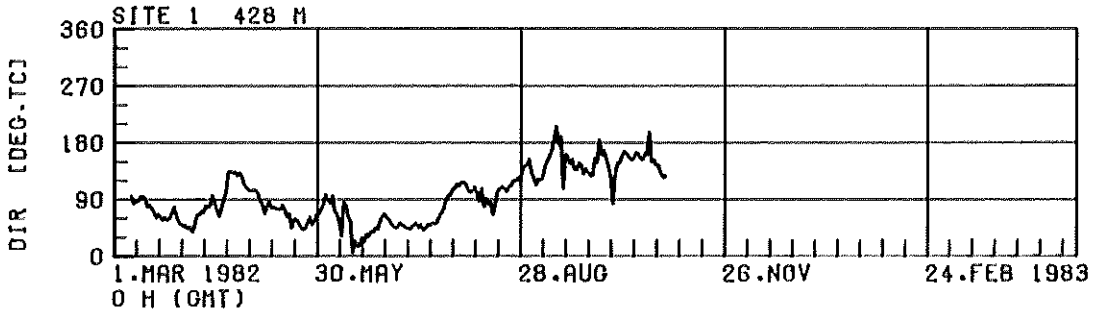
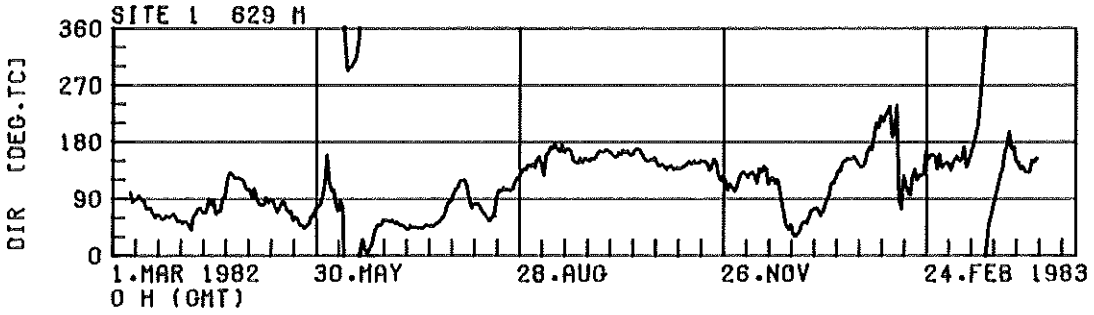
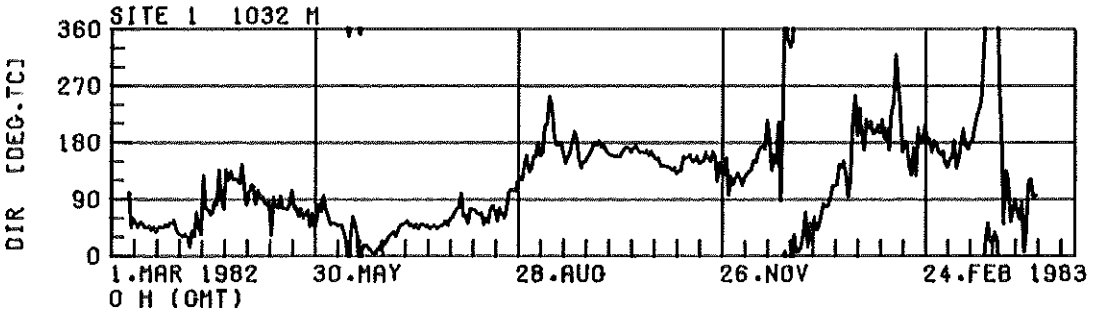
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)

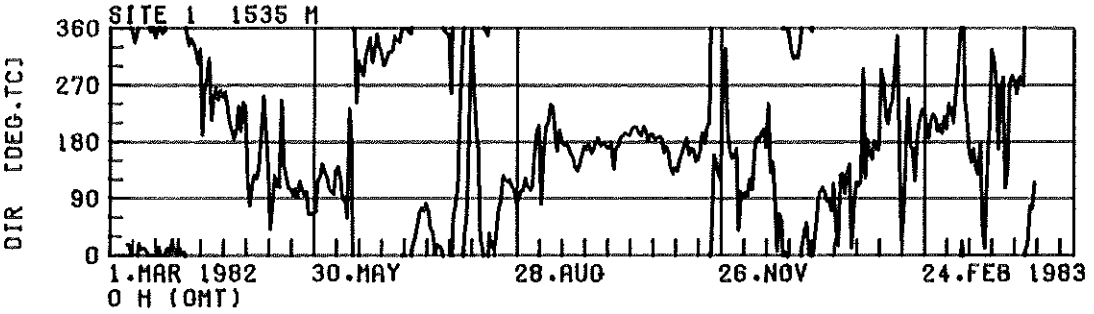

SITE 1 1032 M
10.00
5.00
0.00
-5.00
-10.00
-15.00
[CM/S]
N
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)

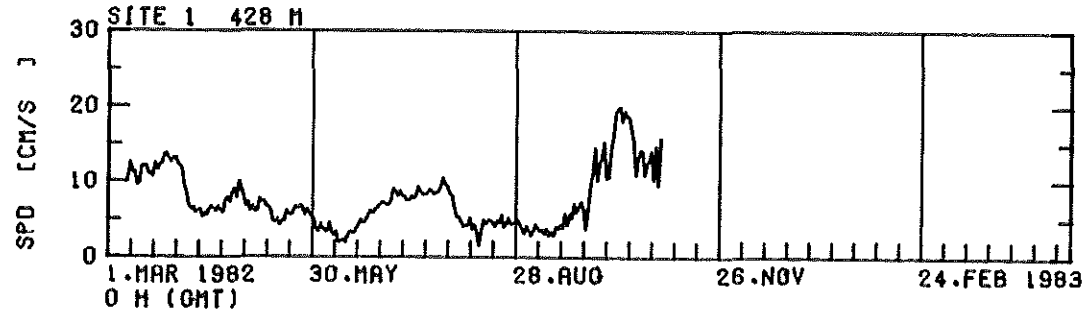

SITE 1 1535 M
10.00
5.00
0.00
-5.00
-10.00
[CM/S]
N
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)

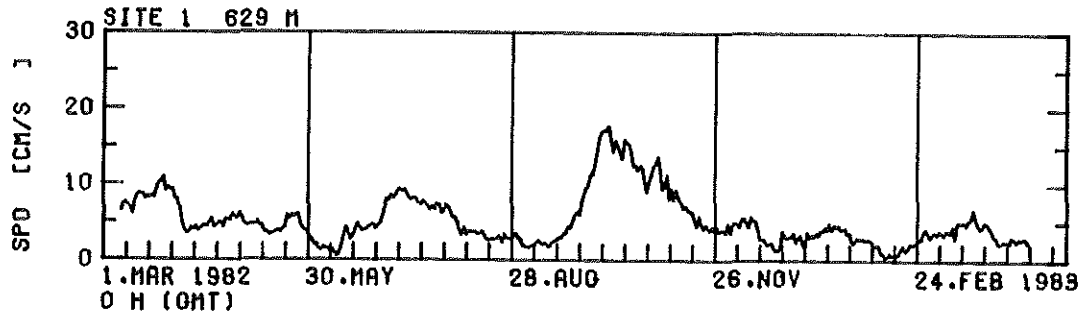

SITE 1 428 M
DIR [DEG.TC]
360
270
180
90
0
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)

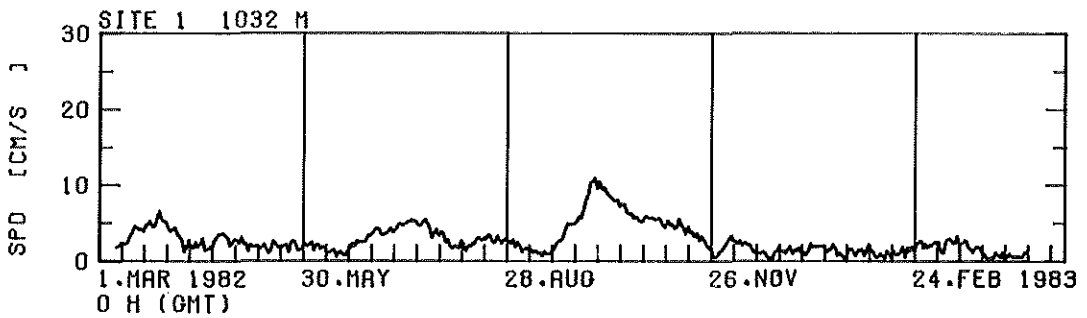

SITE 1 629 M
DIR [DEG.TC]
360
270
180
90
0
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)

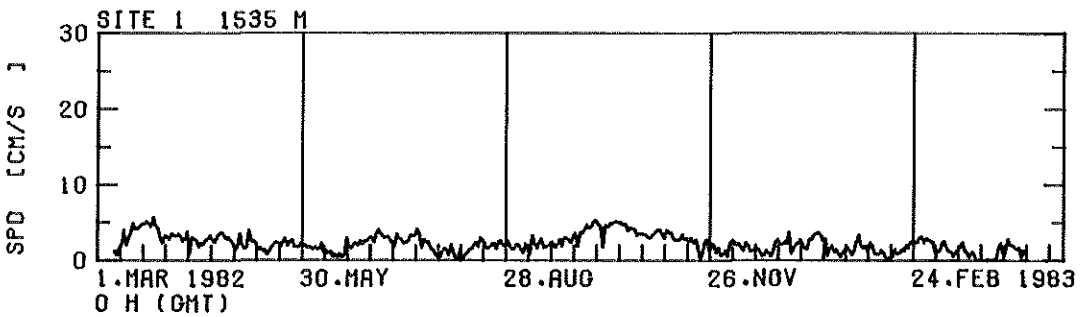

SITE 1 1032 M
DIR [DEG.TC]
360
270
180
90
0
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)

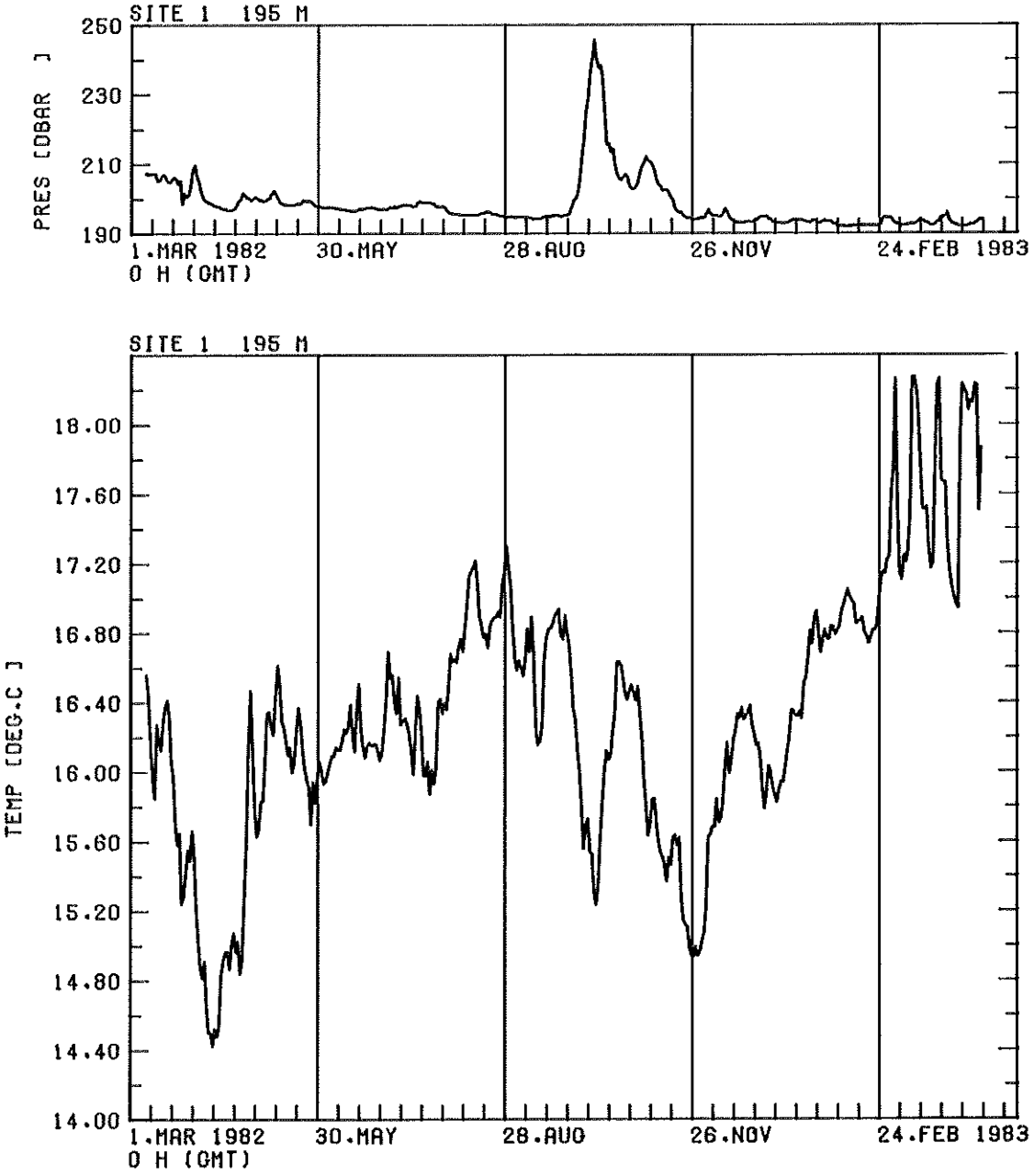

SITE 1 1535 M
DIR [DEG.TC]
360
270
180
90
0
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)

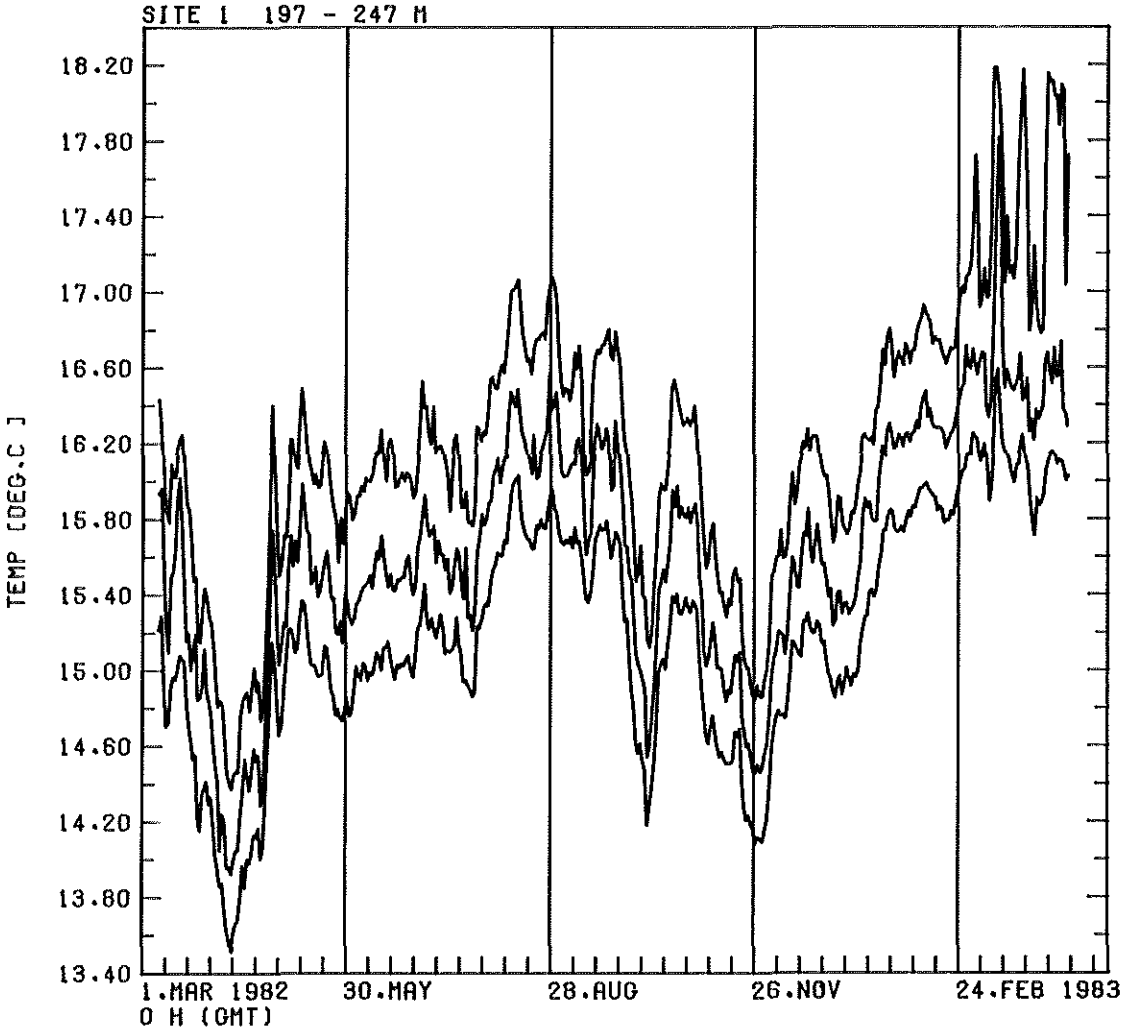

SITE 1 428 M
SPD [CM/S]
30
20
10
0
1.MAR 1982
0 H (GMT)
30.MAY
28.AUG
26.NOV
24.FEB 1983

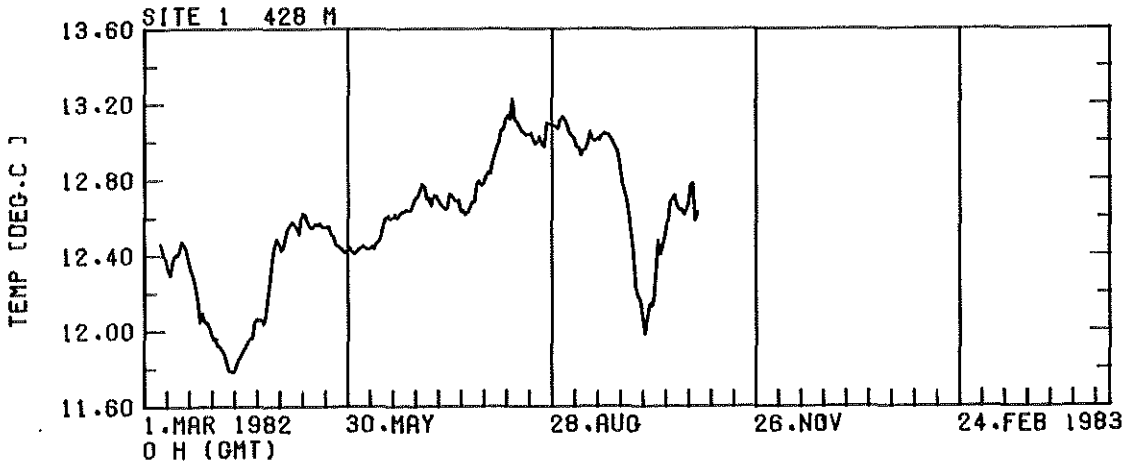

SITE 1 629 M
SPD [CM/S]
30
20
10
0
1.MAR 1982
0 H (GMT)
30.MAY
28.AUG
26.NOV
24.FEB 1983

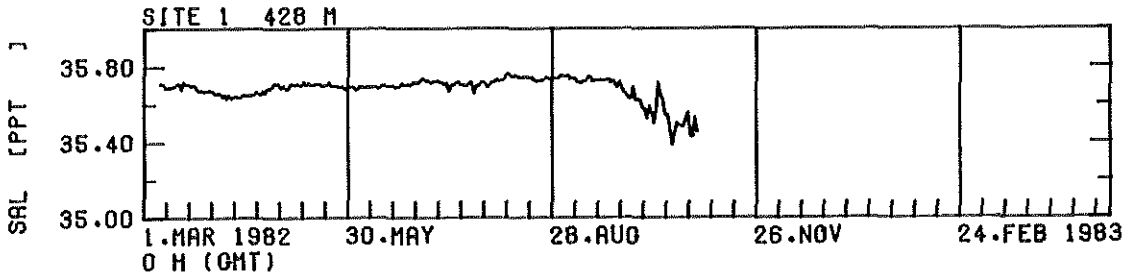

SITE 1 1032 M
SPD [CM/S]
30
20
10
0
1.MAR 1982
0 H (GMT)
30.MAY
28.AUG
26.NOV
24.FEB 1983

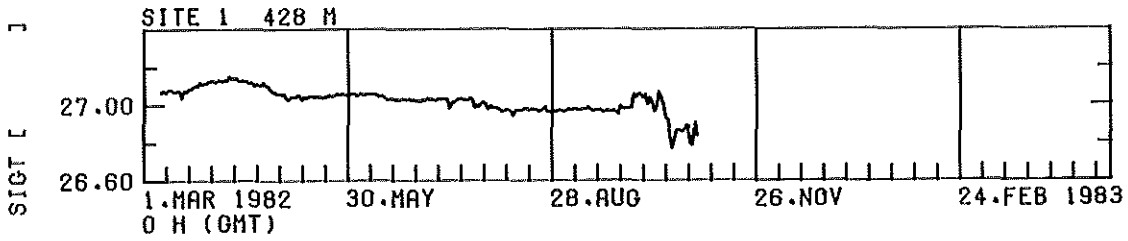

SITE 1 1535 M
SPD [CM/S]
30
20
10
0
1.MAR 1982
0 H (GMT)
30.MAY
28.AUG
26.NOV
24.FEB 1983

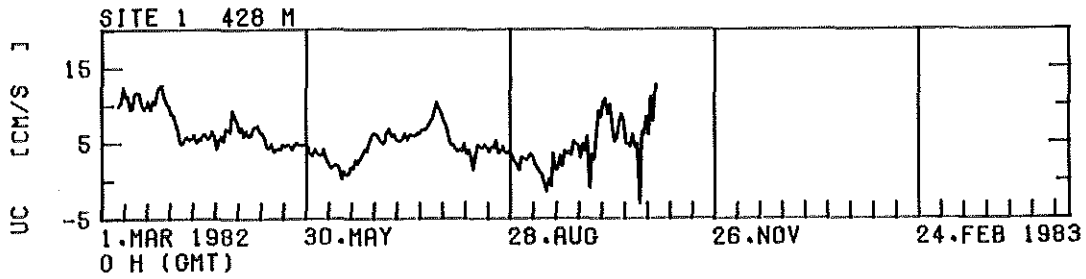

SITE 1 195 M
PRES [DBAR]
250
230
210
190
1.MAR 1982
0 H (GMT)
30.MAY
28.AUG
26.NOV
24.FEB 1983
SITE 1 195 M
TEMP [DEG.C]
18.00
17.60
17.20
16.80
16.40
16.00
15.60
15.20
14.80
14.40
14.00
1.MAR 1982
0 H (GMT)
30.MAY
28.AUG
26.NOV
24.FEB 1983

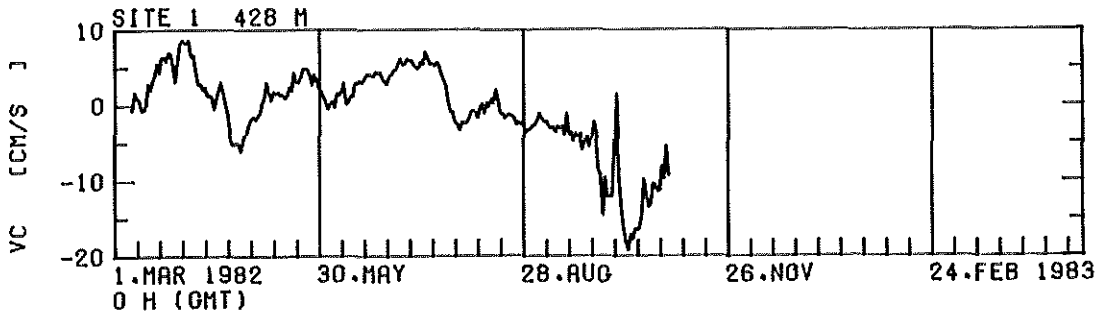

SITE 1 197 - 247 M
18.20
17.80
17.40
17.00
16.60
16.20
15.80
15.40
15.00
14.60
14.20
13.80
13.40
TEMP [DEG.C]
1.MAR 1982
0 H (GMT)
30.MAY
28.AUG
26.NOV
24.FEB 1983

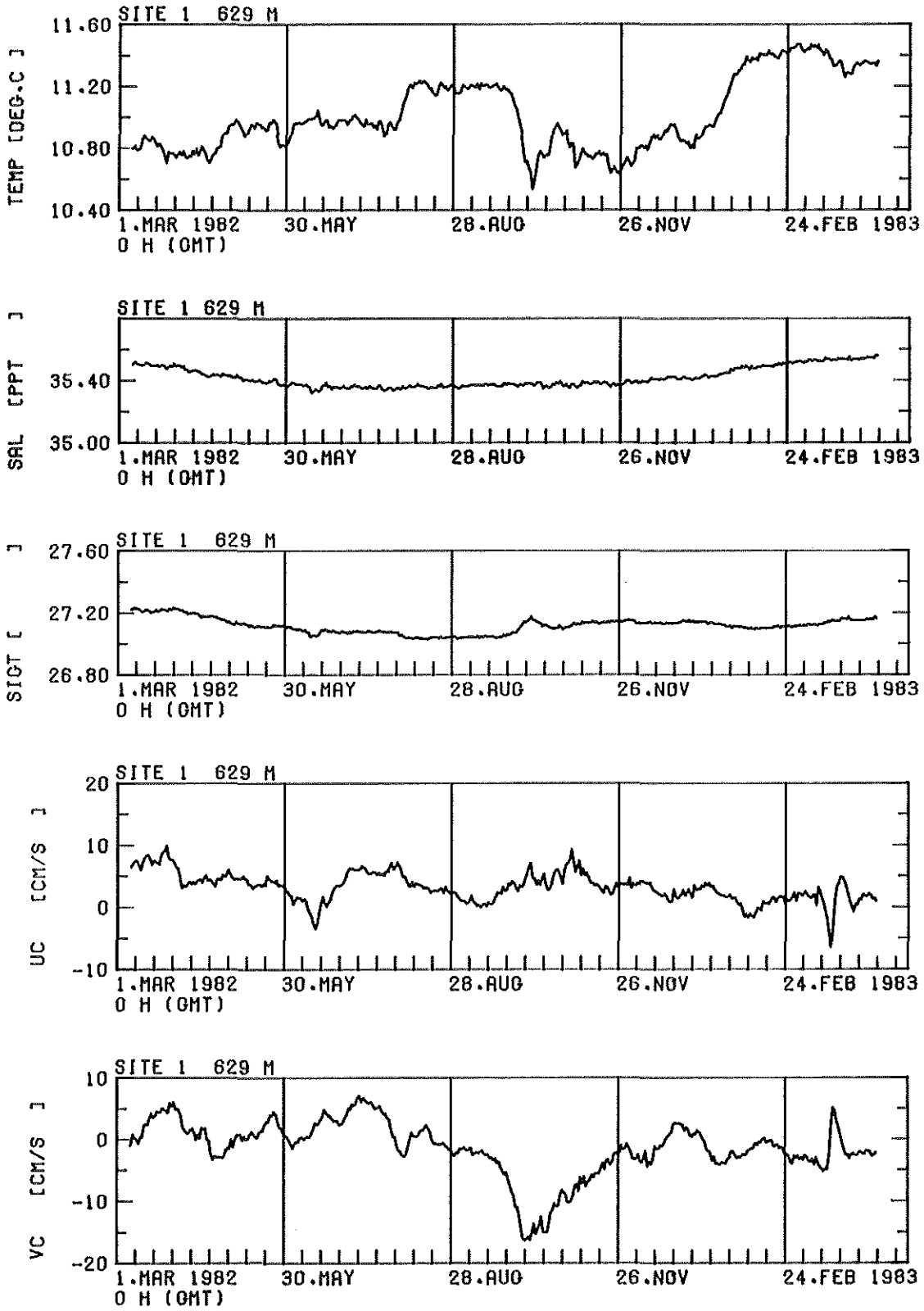

SITE 1 428 M
TEMP [DEG.C]
13.60
13.20
12.80
12.40
12.00
11.60
1.MAR 1982
0 H (GMT)
30.MAY
28.AUG
26.NOV
24.FEB 1983

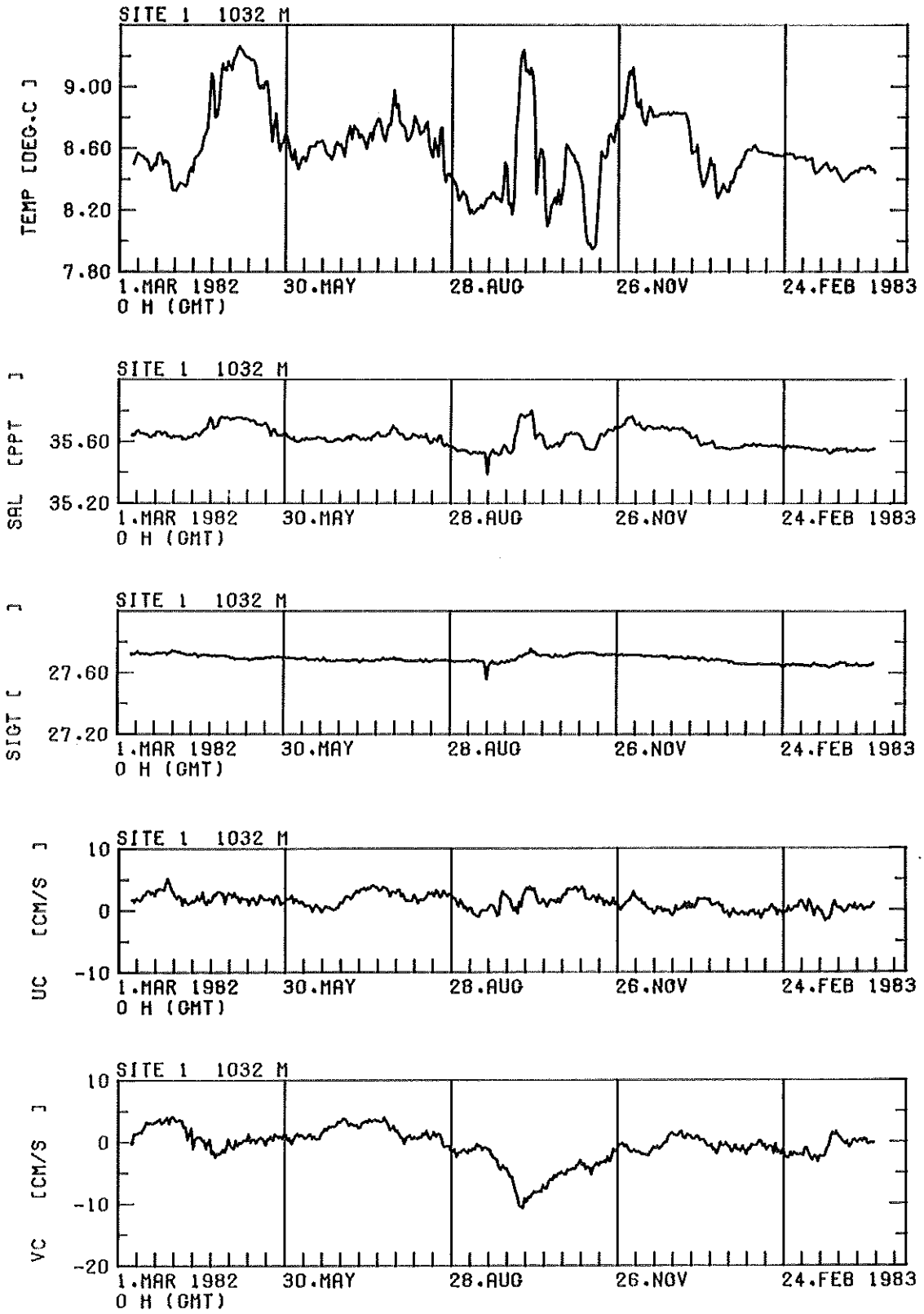

SITE 1 428 M
SAL [PPT]
35.80
35.40
35.00
1.MAR 1982
0 H (GMT)
30.MAY
28.AUG
26.NOV
24.FEB 1983


SITE 1 428 M
SIGT [ ]
27.00
26.60
1.MAR 1982
0 H (GMT)
30.MAY
28.AUG
26.NOV
24.FEB 1983


SITE 1 428 M
UC [CM/S]
15
5
-5
1.MAR 1982
0 H (GMT)
30.MAY
28.AUG
26.NOV
24.FEB 1983


SITE 1 428 M
VC [CM/S]
10
0
-10
-20
1.MAR 1982
0 H (GMT)
30.MAY
28.AUG
26.NOV
24.FEB 1983


SITE 1 629 M
TEMP [DEG.C]
11.60
11.20
10.80
10.40
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)
SITE 1 629 M
SAL [PPT]
35.40
35.00
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)
SITE 1 629 M
SIGT [ ]
27.60
27.20
26.80
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)
SITE 1 629 M
UC [CM/S]
20
10
0
-10
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)
SITE 1 629 M
VC [CM/S]
10
0
-10
-20
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)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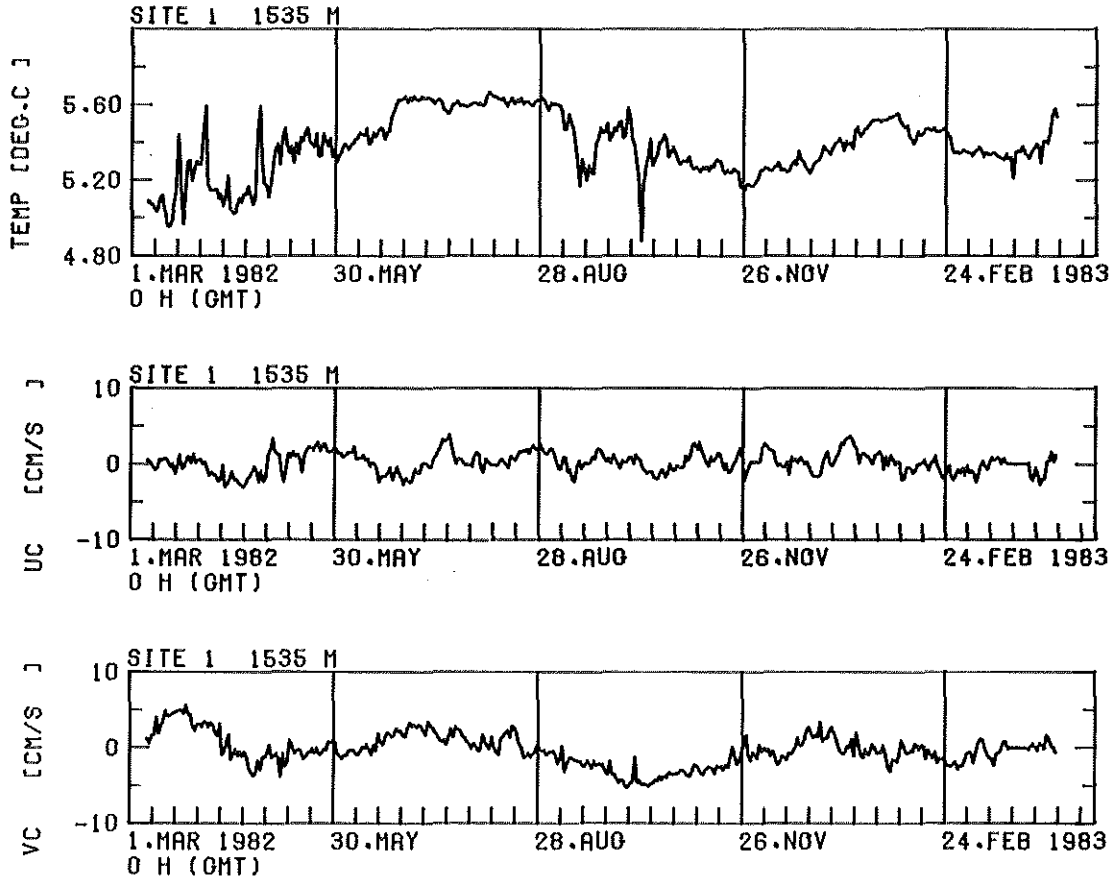
9.00
8.60
8.20
7.80
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)
SITE 1 1032 M
SAL [PPT]
35.60
35.20
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)
SITE 1 1032 M
SIGT [ ]
27.60
27.20
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)
SITE 1 1032 M
UC [CM/S]
10
0
-10
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)
SITE 1 1032 M
VC [CM/S]
10
0
-10
-20
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)


SITE 1 1535 M
TEMP [DEG.C]
5.60
5.20
4.80
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)
SITE 1 1535 M
UC [CM/S]
10
0
-10
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)
SITE 1 1535 M
VC [CM/S]
10
0
-10
1.MAR 1982
30.MAY
28.AUG
26.NOV
24.FEB 1983
0 H (GMT)

276400

N1

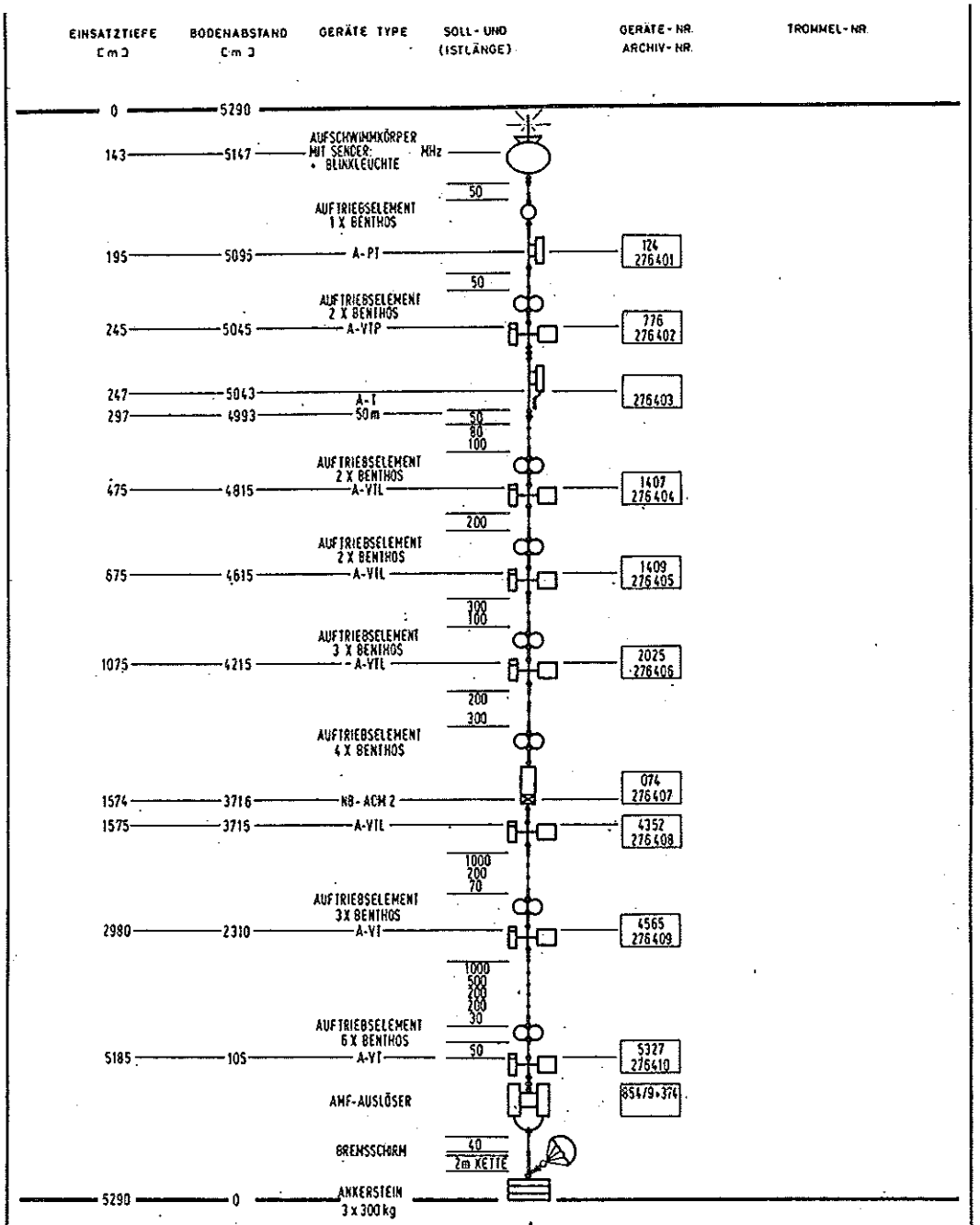
19 Apr 1983 - 19 Oct 1983

NEADS site 1, 33° 10.1'N, 21° 55.0'W, water depth 5290 m
IfM mooring No 276400
Deployed: 19 Apr 1983, Meteor 64/6
Recovered: 19 Oct 1983, Poseidon 104/3
Start of record: 19 Apr 1983, 1800Z.
End of record: 19 Oct 1983, 0800Z.
Recording interval: 60 min except thermistor-chains (120 min)
and 276401 (5 min)
Time base check: ok

Identification	depth (m)	Parameters and corrections P	T	S	$\lvert\vec{u}\rvert$	ϕ	Remarks
276401	195	x	x	-	-	-	5 min recording interval(1)
402	245	x	x	x	x	x	$S=S+(cycle-1)*3.05x10^{-4}+0.10$
403	247-297	-	x	-	-	-	11 thermistors
404	475	-	x	x	x	x	$S=S+(cycle-1)*2.07x10^{-4}+1.288$
405	675	-	-0.11	-0.39	x	x	
406	1075	-	x	-0.08	x	x	
407	1574	-	x	-	x	x	ACM(2)
408	1575	-	0.45	-0.36	x	x	
409	2980	-	0.11	-	x	x	
410	5185	-	x	-	-	-	encoder failure for $\lvert\vec{u}\rvert$, ϕ

(1) used only during launching. Data not included here.
(2) Acoustic Current Meter (ACM) for comparison with Aanderaa 276408. Data not included here.

Symbols see page 97
Values for linear corrections are included.


EINSATZTIEFE [m]
BODENABSTAND [m]
GERÄTE TYPE
SOLL- UND (ISTLÄNGE)
GERÄTE-NR. ARCHIV-NR.
TROMMEL-NR.
0
5290
143
5147
AUFSCHWIMMKÖRPER MIT SENDER: MHz + BLINKLEUCHTE
50
AUFTRIEBSELEMENT 1 X BENTHOS
195
5095
A-PT
124 276401
50
AUFTRIEBSELEMENT 2 X BENTHOS
245
5045
A-VTP
776 276402
247
5043
A-T
276403
297
4993
50m
50
80
100
AUFTRIEBSELEMENT 2 X BENTHOS
475
4815
A-VIL
1407 276404
200
AUFTRIEBSELEMENT 2 X BENTHOS
675
4615
A-VIL
1409 276405
300
100
AUFTRIEBSELEMENT 3 X BENTHOS
1075
4215
A-VIL
2025 276406
200
300
AUFTRIEBSELEMENT 4 X BENTHOS
1574
3716
NB-ACM 2
074 276407
1575
3715
A-VIL
4352 276408
1000
200
70
AUFTRIEBSELEMENT 3X BENTHOS
2980
2310
A-VI
4565 276409
1000
500
200
100
30
AUFTRIEBSELEMENT 6 X BENTHOS
5185
105
A-VI
50
5327 276410
AMF-AUSLÖSER
85479+374
BREMSSCHIRM
40
2m KETTE
ANKERSTEIN 3 x 300 kg
5290
0
VERBINDUNGSSYMBOLE: O RING ● SCHÄKEL (SCHLÜSSELWEITE 30 MM) △ ANSCHLUß AM GERÄT ∞ DREHWIRBEL
BEMERKUNGEN:
INSTITUT FÜR MEERESKUNDE - KIEL
VERANKERUNG NR.: 276-4
NR.: SFB 133 - C1
(—GEPLANT—)
SCHIFF: FS "METEOR" M 64
EXPEDITION: BIOZIRKEL
SEEGEBIET: NO-ATLANTIK 33°10.1'N, 21°55.0'W
WASSERTIEFE: ~5290 m
AUSLEGEDATUM: 19.4.83
AUFNAHMEDATUM: 19.10.83

FILE: NEADS SITE 1 276402UVC/E1 MOORING ID: 276402 START-CYCLE: 1. STOP-CYCLE: 4383. NUMBER OF VALUES: 4383.

TIME RANGE: 19. 4.1983 18: 0: 0: 0/19.10.1983 8: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.60000D+02 245 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	PRES	[DBAR]	0.2422E+03	0.2574E+03	0.2444E+03	0.2920E-01	0.3737E+01	0.1933E+01	0.2255E+01	0.1074E+02
2	TEMP	[DEG.C]	0.1375E+02	0.1690E+02	0.1528E+02	0.1093E-01	0.5231E+00	0.7233E+00	-0.2117E+00	0.1866E+01
3	SAL	[PPT]	0.3572E+02	0.3632E+02	0.3597E+02	0.1469E-02	0.9454E-02	0.9723E-01	0.4931E+00	0.3108E+01
4	UC	[CM/S]	-0.1852E+02	0.2269E+02	0.3907E+01	0.8660E-01	0.3287E+02	0.5733E+01	-0.3765E+00	0.3345E+01
5	VC	[CM/S]	-0.2476E+02	0.1342E+02	-0.5874E+01	0.9450E-01	0.3914E+02	0.6256E+01	0.8917E-01	0.2377E+01
6	SIGT	[ ]	0.2642E+02	0.2693E+02	0.2667E+02	0.1856E-02	0.1510E-01	0.1229E+00	0.3178E+00	0.1667E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
4	5	0.7054E+01	0.3600E+02	0.6000E+01	0.9063E-01	146.37

FILE: NEADS SITE 1 276403 /E3 MOORING ID: 276403 START-CYCLE: 1. STOP-CYCLE: 2192. NUMBER OF VALUES: 2192.

TIME RANGE: 19. 4.1983 18: 0: 0: 0/19.10.1983 8: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.12000D+03 246-296 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.1365E+02	0.1681E+02	0.1516E+02	0.1535E-01	0.5166E+00	0.7187E+00	-0.1772E+00	0.1915E+01
2	TEMP	[DEG.C]	0.1356E+02	0.1679E+02	0.1509E+02	0.1509E-01	0.4969E+00	0.7063E+00	-0.1998E+00	0.1898E+01
3	TEMP	[DEG.C]	0.1346E+02	0.1667E+02	0.1501E+02	0.1484E-01	0.4827E+00	0.6947E+00	-0.2003E+00	0.1906E+01
4	TEMP	[DEG.C]	0.1337E+02	0.1652E+02	0.1489E+02	0.1459E-01	0.4663E+00	0.6829E+00	-0.2087E+00	0.1908E+01
5	TEMP	[DEG.C]	0.1332E+02	0.1634E+02	0.1484E+02	0.1437E-01	0.4527E+00	0.6729E+00	-0.2043E+00	0.1916E+01
6	TEMP	[DEG.C]	0.1330E+02	0.1620E+02	0.1477E+02	0.1416E-01	0.4395E+00	0.6630E+00	-0.2125E+00	0.1926E+01
7	TEMP	[DEG.C]	0.1325E+02	0.1612E+02	0.1468E+02	0.1389E-01	0.4231E+00	0.6505E+00	-0.2131E+00	0.1944E+01
8	TEMP	[DEG.C]	0.1315E+02	0.1610E+02	0.1464E+02	0.1371E-01	0.4121E+00	0.6420E+00	-0.2133E+00	0.1953E+01
9	TEMP	[DEG.C]	0.1315E+02	0.1610E+02	0.1458E+02	0.1359E-01	0.4049E+00	0.6363E+00	-0.2131E+00	0.1963E+01
10	TEMP	[DEG.C]	0.1313E+02	0.1595E+02	0.1447E+02	0.1336E-01	0.3915E+00	0.6257E+00	-0.2153E+00	0.1978E+01
11	TEMP	[DEG.C]	0.1313E+02	0.1588E+02	0.1445E+02	0.1330E-01	0.3877E+00	0.6226E+00	-0.2210E+00	0.1983E+01

FILE: NEADS SITE 1 276404UVC/E1 MOORING ID: 276404 START-CYCLE: 1. STOP-CYCLE: 4383. NUMBER OF VALUES: 4383.

TIME RANGE: 19. 4.1983 18: 0: 0: 0/19.10.1983 8: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.60000D+02 475 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.1149E+02	0.1320E+02	0.1233E+02	0.5771E-02	0.1460E+00	0.3820E+00	-0.1596E+00	0.1951E+01
2	SAL	[PPT]	0.3537E+02	0.3580E+02	0.3550E+02	0.1118E-02	0.5480E-02	0.7403E-01	0.1258E+01	0.4021E+01
3	UC	[CM/S]	-0.1556E+02	0.1577E+02	0.2144E+01	0.6073E-01	0.1616E+02	0.4020E+01	-0.3693E+00	0.3833E+01
4	VC	[CM/S]	-0.1742E+02	0.1103E+02	-0.4056E+01	0.6347E-01	0.1766E+02	0.4202E+01	0.3460E-01	0.2591E+01
5	SIGT	[ ]	0.2674E+02	0.2712E+02	0.2693E+02	0.1360E-02	0.8109E-02	0.9005E-01	0.1612E+00	0.1791E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
3	4	0.4588E+01	0.1691E+02	0.4112E+01	0.6211E-01	152.14

FILE: NEADS SITE 1 276405UVC/TR MOORING ID: 276405 START-CYCLE: 1. STOP-CYCLE: 4383. NUMBER OF VALUES: 4383.

TIME RANGE: 19. 4.1983 18: 0: 0: 0/19.10.1983 8: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 675 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.9996E+01	0.1120E+02	0.1061E+02	0.3737E-02	0.6120E-01	0.2474E+00	-0.5302E+00	0.2344E+01
2	SAL	[PPT]	0.3542E+02	0.3569E+02	0.3551E+02	0.5462E-03	0.1308E-02	0.3616E-01	0.1314E+01	0.6237E+01
3	UC	[CM/S]	-0.1186E+02	0.1331E+02	0.1945E+01	0.5328E-01	0.1244E+02	0.3527E+01	-0.3171E+00	0.2989E+01
4	VC	[CM/S]	-0.1368E+02	0.1165E+02	-0.2393E+01	0.5808E-01	0.1478E+02	0.3845E+01	0.2497E+00	0.2770E+01
5	SIGT	[ ]	0.2714E+02	0.2739E+02	0.2726E+02	0.6315E-03	0.1748E-02	**0.4181E-01**	**0.2713E+00**	**0.2431E+01**

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
3	4	0.3084E+01	0.1361E+02	0.3689E+01	0.5573E-01	140.89

FILE: NEADS SITE 1 276406UVC/E1 MOORING ID: 276406 START-CYCLE: 1. STOP-CYCLE: 4383. NUMBER OF VALUES: 4383.

TIME RANGE: 19. 4.1983 18: 0: 0: 0/19.10.1983 8: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 1075 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.7937E+01	0.9011E+01	0.8414E+01	0.2580E-02	0.2918E-01	0.1708E+00	0.3891E+00	0.2527E+01
2	SAL	[PPT]	0.3536E+02	0.3602E+02	0.3556E+02	0.1386E-02	0.8415E-02	0.9173E-01	0.1532E+01	0.5865E+01
3	UC	[CM/S]	-0.9806E+01	0.1167E+02	0.2404E-01	0.4650E-01	0.9478E+01	0.3079E+01	0.5405E-01	0.2905E+01
4	VC	[CM/S]	-0.1026E+02	0.9881E+01	-0.8482E+00	0.4451E-01	0.8682E+01	0.2946E+01	-0.1855E-01	0.2716E+01
5	SIGT	[ ]	0.2744E+02	0.2803E+02	0.2767E+02	0.1000E-02	0.4385E-02	0.6622E-01	0.1580E+01	0.8221E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
3	4	0.9436E+00	0.3080E+01	0.3013E+01	0.4551E-01	178.38

FILE: NEADS SITE 1 276408UVC/E2 MOORING ID: 276408 START-CYCLE: 1. STOP-CYCLE: 4383. NUMBER OF VALUES: 4383.

TIME RANGE: 19. 4.1983 18: 0: 0: 0/19.10.1983 8: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 1575 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	SAL	[PPT]	0.3494E+02	0.3553E+02	0.3521E+02	0.9034E-03	0.3577E-02	0.5981E-01	0.3930E+00	0.4796E+01
2	TEMP	[DEG.C]	0.4976E+01	0.5732E+01	0.5304E+01	0.2039E-02	0.1822E-01	0.1350E+00	0.2894E+00	0.2430E+01
3	UC	[CM/S]	-0.8171E+01	0.6866E+01	-0.4530E+00	0.3834E-01	0.6442E+01	0.2538E+01	-0.5647E-01	0.2733E+01
4	VC	[CM/S]	-0.8366E+01	0.9641E+01	-0.3443E+00	0.3985E-01	0.6959E+01	0.2638E+01	0.2609E-01	0.2703E+01
5	SIGT	[ ]	0.2762E+02	0.2806E+02	0.2783E+02	0.6624E-03	0.1923E-02	0.4386E-01	0.3499E+00	0.5905E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
3	4	0.5690E+00	0.6700E+01	0.2589E+01	0.3910E-01	232.77

FILE: NEADS SITE 1 276409UVC/TR MOORING ID: 276409 START-CYCLE: 1. STOP-CYCLE: 4383. NUMBER OF VALUES: 4383.

TIME RANGE: 19. 4.1983 18: 0: 0: 0/19.10.1983 8: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000D+02 2980 m

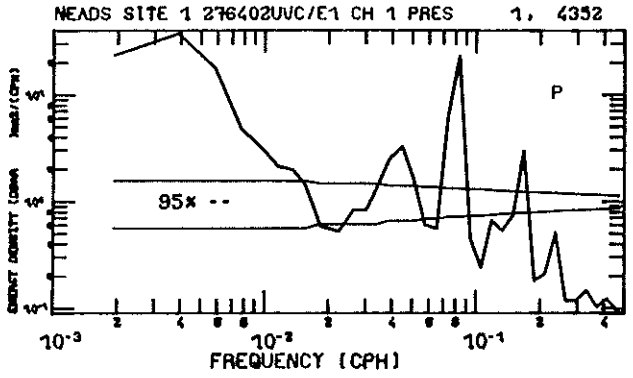
	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.2751E+01	0.2919E+01	0.2807E+01	0.3409E-03	0.5094E-03	0.2257E-01	0.1101E+01	0.6380E+01
2	UC	[CM/S]	-0.1018E+02	0.6024E+01	-0.5515E+00	0.3188E-01	0.4455E+01	0.2111E+01	-0.3970E+00	0.3751E+01
3	VC	[CM/S]	-0.7479E+01	0.6439E+01	-0.3213E+00	0.3012E-01	0.3976E+01	0.1994E+01	0.9077E-01	0.3341E+01

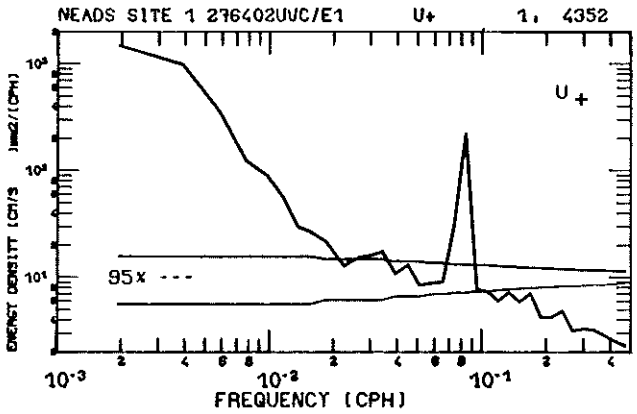
PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
2	3	0.6383E+00	0.4216E+01	0.2053E+01	0.3101E-01	239.78

FILE: NEADS SITE 1 276410UVC/TR MOORING ID: 276410 START-CYCLE: 1. STOP-CYCLE: 4383. NUMBER OF VALUES: 4383.

TIME RANGE: 19. 4.1983 18: 0: 0: 0/19.10.1983 8: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000D+02 5185 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.2456E+01	0.2521E+01	0.2468E+01	0.9555E-04	0.4002E-04	0.6326E-02	-0.7505E+00	0.3316E+01


NEADS SITE 1 276402UVC/E1 CH 1 PRES 1, 4352
P
95% --
FREQUENCY (CPH)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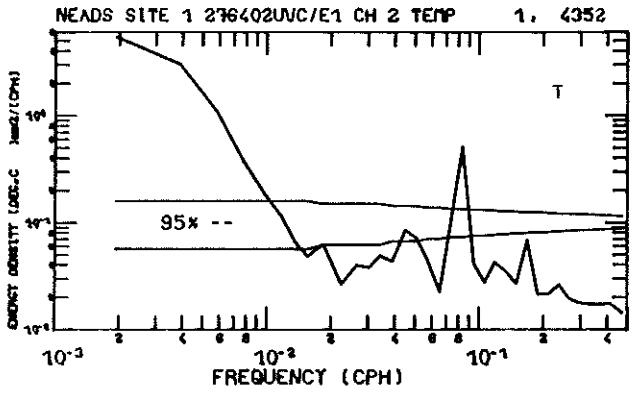
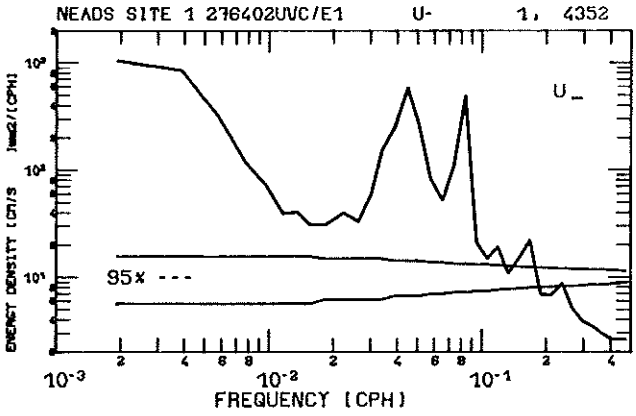
U+
95% ---
FREQUENCY (CPH)


NEADS SITE 1 276402UVC/E1 CH 2 TEMP 1, 4352
T
95% --
FREQUENCY (CPH)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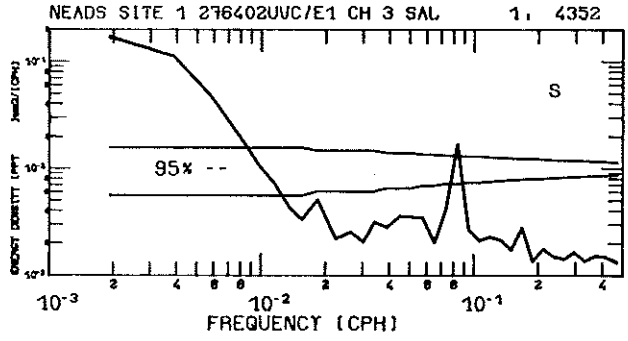
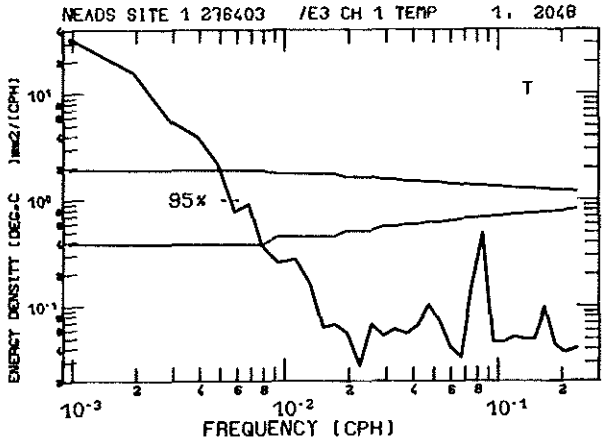
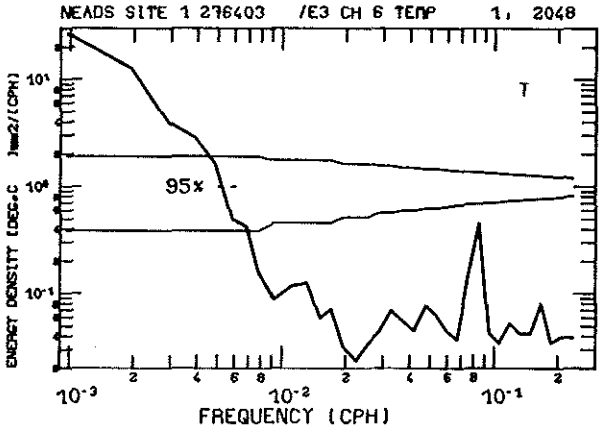
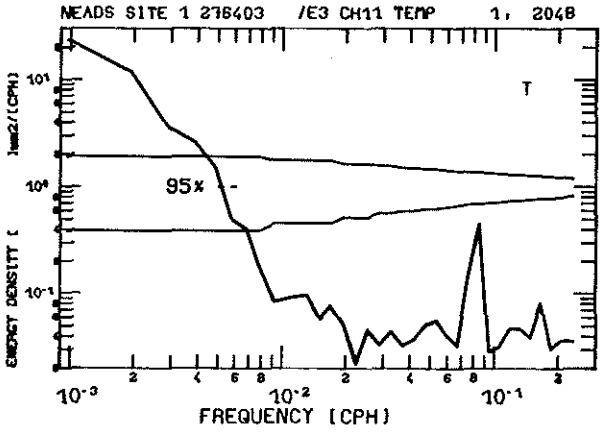
U-
95% ---
FREQUENCY (CPH)


NEADS SITE 1 276402UVC/E1 CH 3 SAL 1, 4352
S
95% --
FREQUENCY (CPH)



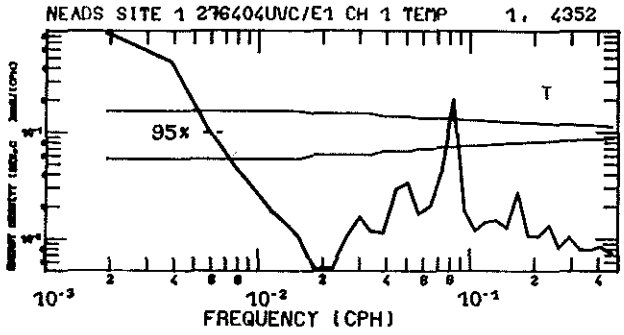


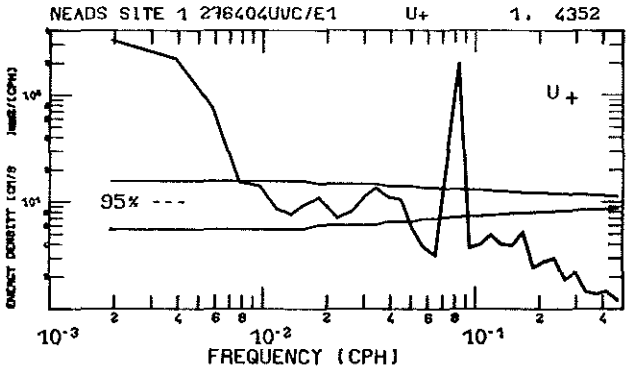


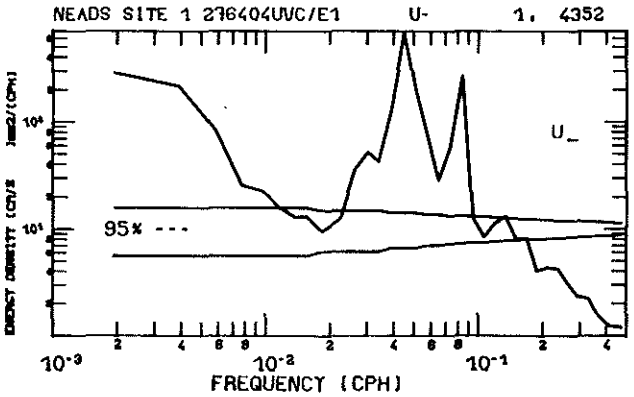
276403,247m

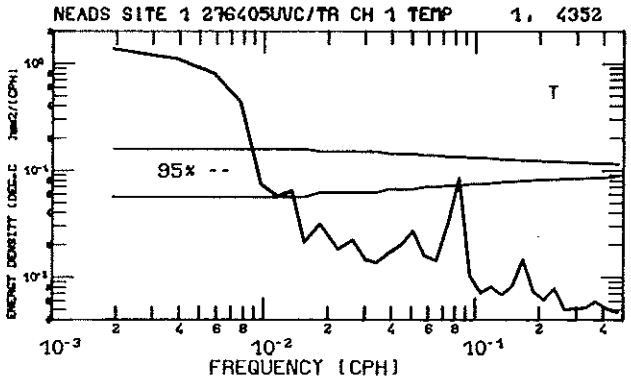
272m

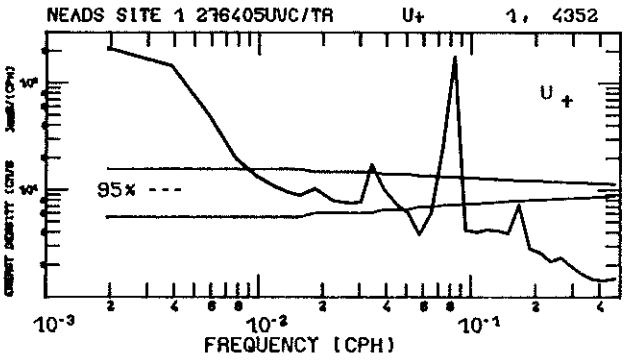
297m

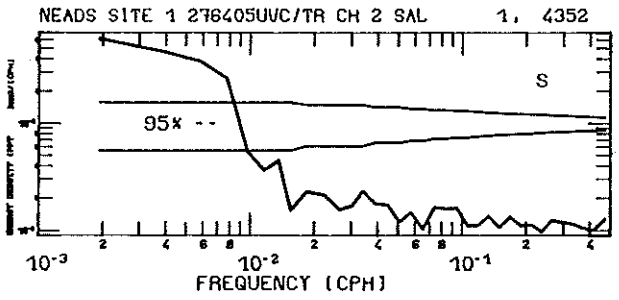

NEADS SITE 1 276404UVC/E1 CH 1 TEMP 1, 4352
T
95% ---
10⁻³
10⁻²
10⁻¹
FREQUENCY (CPH)

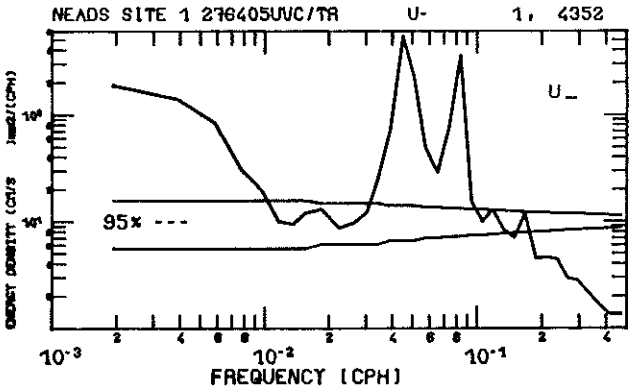

NEADS SITE 1 276404UVC/E1 U+ 1, 4352
U+
95% ---
10⁻³
10⁻²
10⁻¹
FREQUENCY (CPH)

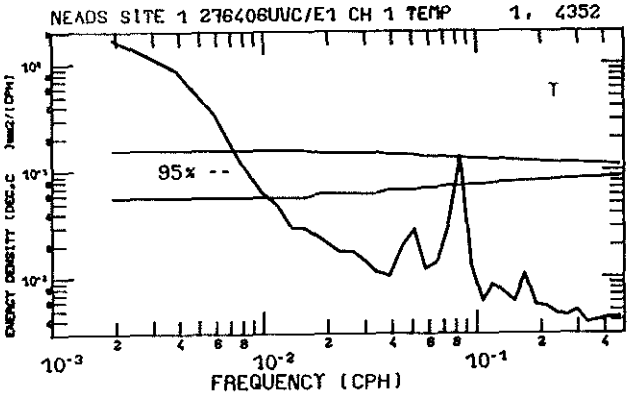

NEADS SITE 1 276404UVC/E1 U- 1, 4352
U-
95% ---
10⁻³
10⁻²
10⁻¹
FREQUENCY (CPH)

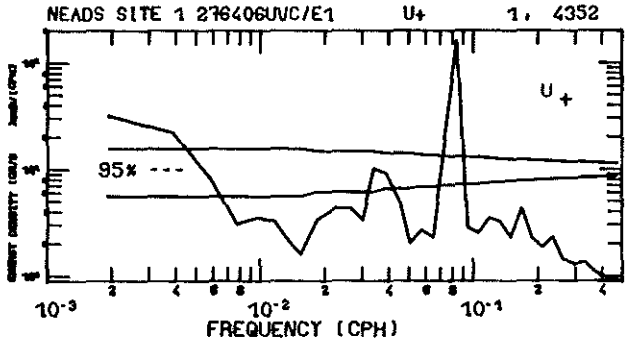

NEADS SITE 1 276405UVC/TR CH 1 TEMP 1, 4352
T
95% --
FREQUENCY [CPH]

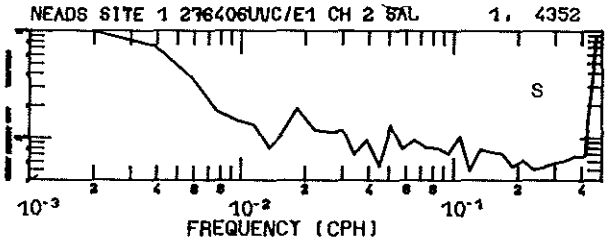

NEADS SITE 1 276405UVC/TR U+ 1, 4352
U +
95% ---
FREQUENCY [CPH]

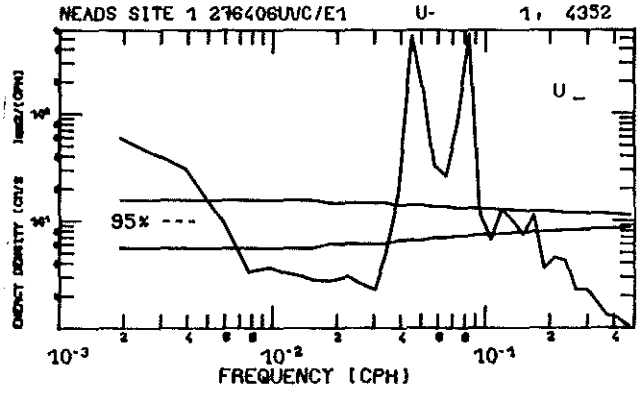

NEADS SITE 1 276405UVC/TR CH 2 SAL 1, 4352
S
95% --
FREQUENCY [CPH]


NEADS SITE 1 276405UVC/TR U- 1, 4352
U _
95% ---
FREQUENCY [CPH]

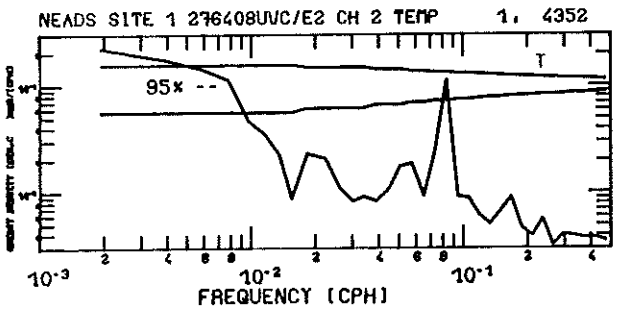








276406,1075m


NEADS SITE 1 276408UVC/E2 CH 2 TEMP 1, 4352
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95% --
10-3
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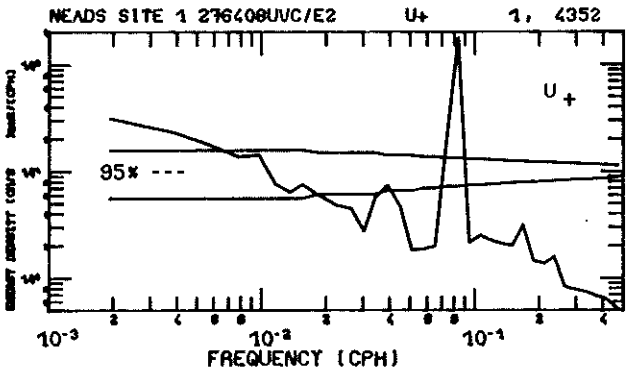
10-1
FREQUENCY [CPH]


NEADS SITE 1 276408UVC/E2 U+ 1, 4352
U+
95% ---
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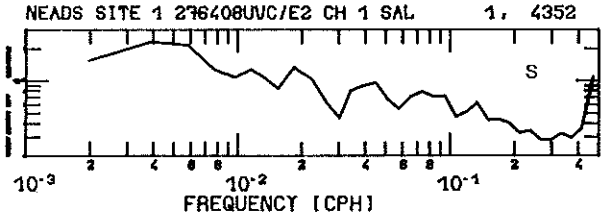
10-1
FREQUENCY [CPH]


NEADS SITE 1 276408UVC/E2 CH 1 SAL 1, 4352
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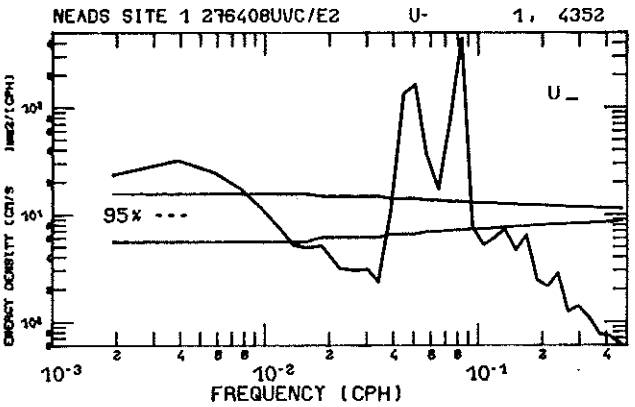
FREQUENCY [CPH]


NEADS SITE 1 276408UVC/E2 U- 1, 4352
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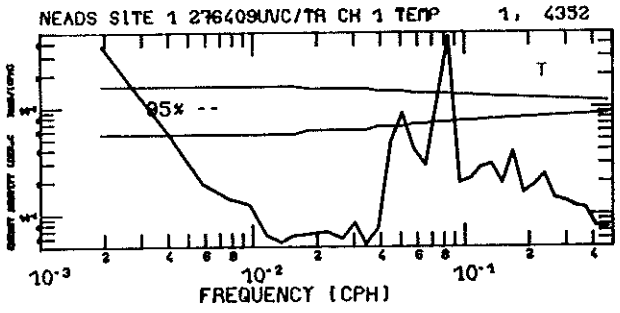
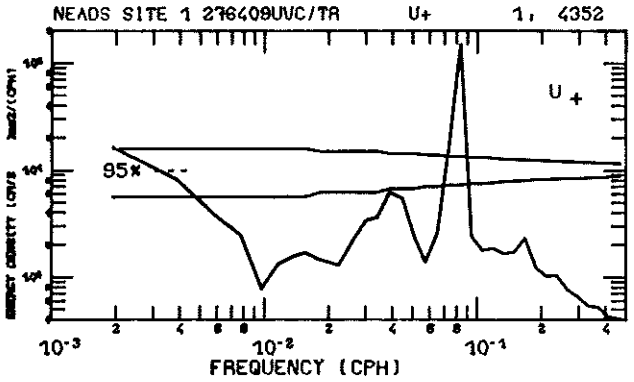
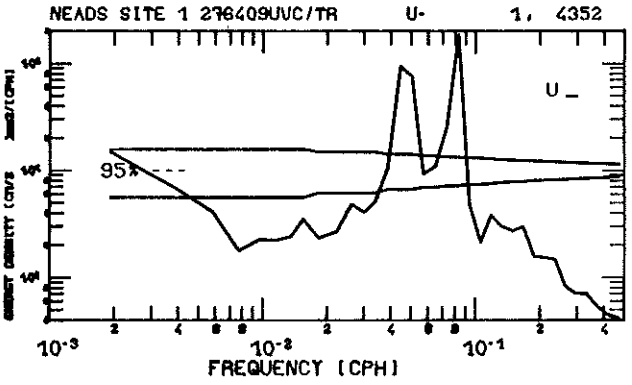
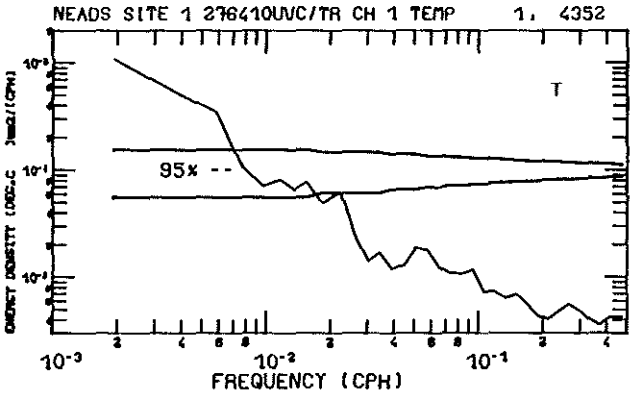
FREQUENCY [CPH]







276409,2980m



276410,5185m

FILE: NEADS SITE 1 276402/A 024 MOORING ID: 276402 START-CYCLE: 1. STOP-CYCLE: 177. NUMBER OF VALUES: 177.

TIME RANGE: 22. 4.1983 23:30: 0: 0/15.10.1983 23:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 245 m

VARIABLE		UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1	PRES	[DBAR]	0.2422E+03	0.2496E+03	0.2443E+03	0.1154E+00	0.2355E+01	0.1535E+01	0.1510E+01	0.5323E+01
2	TEMP	[DEG.C]	0.1400E+02	0.1650E+02	0.1526E+02	0.5340E-01	0.5048E+00	0.7105E+00	-0.2048E+00	0.1779E+01
3	SAL	[PPT]	0.3578E+02	0.3622E+02	0.3596E+02	0.6271E-02	0.6960E-02	0.8343E-01	0.2556E+00	0.2733E+01
4	UC	[CM/S]	-0.1008E+02	0.1413E+02	0.3916E+01	0.3418E+00	0.2068E+02	0.4547E+01	-0.5381E+00	0.3351E+01
5	VC	[CM/S]	-0.1562E+02	0.4856E+01	-0.5838E+01	0.4034E+00	0.2880E+02	0.5366E+01	0.1736E+00	0.1896E+01
6	SIGT	[ ]	0.2651E+02	0.2667E+02	0.2667E+02	0.9171E-02	0.1489E-01	0.1220E+00	0.3482E+00	0.1559E+01

VARIABLES				COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	PRES	2	TEMP	0.5179E+00	0.4750E+00	0.3460E+05	0.1860E+03	0.1398E+02
1	PRES	3	SAL	0.5376E-01	0.4199E+00	0.4416E+04	0.6645E+02	0.4995E+01
1	PRES	4	UC	0.6313E-01	0.9046E-02	0.1241E+07	0.1114E+04	0.8373E+02
1	PRES	5	VC	-0.1776E+01	-0.2157E+00	0.1721E+07	0.1312E+04	0.9860E+02
1	PRES	6	SIGT	-0.7496E-01	-0.4003E+00	0.1577E+04	0.3972E+02	0.2985E+01
2	TEMP	3	SAL	0.4184E-01	0.7059E+00	0.7001E+03	0.2646E+02	0.1989E+01
2	TEMP	4	UC	-0.2195E+00	-0.6795E-01	0.4962E+04	0.7044E+02	0.5295E+01
2	TEMP	5	VC	-0.2006E+01	-0.5261E+00	0.6849E+04	0.8276E+02	0.6220E+01
2	TEMP	6	SIGT	-0.8046E-01	-0.9282E+00	0.2977E+03	0.1725E+02	0.1297E+01
3	SAL	4	UC	0.5830E-01	0.1537E+00	0.2679E+05	0.1637E+03	0.1230E+02
3	SAL	5	VC	-0.1198E+00	-0.2676E+00	0.3724E+05	0.1930E+03	0.1451E+02
3	SAL	6	SIGT	-0.3990E-02	-0.3920E+00	0.1657E+02	0.4071E+01	0.3060E+00
4	UC	5	VC	-0.2589E+01	-0.1061E+00	0.1452E+04	0.3811E+02	0.2864E+01
4	UC	6	SIGT	0.9584E-01	0.1727E+00	0.1468E+05	0.1212E+03	0.9108E+01
5	VC	6	SIGT	0.3506E+00	0.5355E+00	0.2043E+05	0.1430E+03	0.1074E+02

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
4	5	0.7030E+01	0.2474E+02	0.4974E+01	0.3738E+00	146.14

FILE: NEADS SITE 1 276403/A 012 MOORING ID: 276403 START-CYCLE: 1. STOP-CYCLE: 177. NUMBER OF VALUES: 177.

TIME RANGE: 22. 4.1983 23: 0: 0: 0/15.10.1983 23: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.14400D+04 246-296 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.1389E+02	0.1662E+02	0.1514E+02	0.5312E-01	0.4994E+00	0.7067E+00	-0.1676E+00	0.1839E+01
2	TEMP	[DEG.C]	0.1383E+02	0.1634E+02	0.1507E+02	0.5217E-01	0.4817E+00	0.6941E+00	-0.1998E+00	0.1804E+01
3	TEMP	[DEG.C]	0.1376E+02	0.1622E+02	0.1499E+02	0.5131E-01	0.4661E+00	0.6827E+00	-0.1960E+00	0.1818E+01
4	TEMP	[DEG.C]	0.1368E+02	0.1606E+02	0.1487E+02	0.5040E-01	0.4496E+00	0.6705E+00	-0.2018E+00	0.1821E+01
5	TEMP	[DEG.C]	0.1364E+02	0.1597E+02	0.1482E+02	0.4966E-01	0.4365E+00	0.6607E+00	-0.2006E+00	0.1833E+01
6	TEMP	[DEG.C]	0.1359E+02	0.1590E+02	0.1475E+02	0.4891E-01	0.4234E+00	0.6507E+00	-0.2067E+00	0.1846E+01
7	TEMP	[DEG.C]	0.1350E+02	0.1578E+02	0.1466E+02	0.4796E-01	0.4071E+00	0.6380E+00	-0.2109E+00	0.1861E+01
8	TEMP	[DEG.C]	0.1347E+02	0.1572E+02	0.1462E+02	0.4734E-01	0.3966E+00	0.6298E+00	-0.2100E+00	0.1872E+01
9	TEMP	[DEG.C]	0.1344E+02	0.1567E+02	0.1456E+02	0.4693E-01	0.3898E+00	0.6243E+00	-0.2098E+00	0.1875E+01
10	TEMP	[DEG.C]	0.1333E+02	0.1553E+02	0.1445E+02	0.4611E-01	0.3763E+00	0.6135E+00	-0.2131E+00	0.1893E+01
11	TEMP	[DEG.C]	0.1332E+02	0.1553E+02	0.1444E+02	0.4590E-01	0.3730E+00	0.6107E+00	-0.2184E+00	0.1898E+01

FILE: NEADS SITE 1 276404/A 024 MOORING ID: 276404 START-CYCLE: 1. STOP-CYCLE: 177. NUMBER OF VALUES: 177.

TIME RANGE: 22. 4.1983 23:30: 0: 0/15.10.1983 23:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.14400D+04 475 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.1166E+02	0.1292E+02	0.1232E+02	0.2786E-01	0.1374E+00	0.3706E+00	-0.1716E+00	0.1829E+01
2	SAL	[PPT]	0.3542E+02	0.3569E+02	0.3550E+02	0.4555E-02	0.3672E-02	0.6060E-01	0.1397E+01	0.3877E+01
3	UC	[CM/S]	-0.8061E+01	0.6408E+01	0.2126E+01	0.2067E+00	0.7564E+01	0.2750E+01	-0.1188E+01	0.4238E+01
4	VC	[CM/S]	-0.1034E+02	0.3400E+01	-0.4052E+01	0.2502E+00	0.1108E+02	0.3328E+01	0.1255E+00	0.2012E+01
5	SIGT	[ ]	0.2678E+02	0.2707E+02	0.2693E+02	0.6581E-02	0.7665E-02	0.8755E-01	0.2467E+00	0.1704E+01

	VARIABLES		COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	TEMP	2 SAL	-0.7223E-03	-0.3216E-01	0.1731E+03	0.1316E+02	0.9889E+00
1	TEMP	3 UC	-0.2450E+00	-0.2403E+00	0.1175E+04	0.3428E+02	0.2577E+01
1	TEMP	4 VC	-0.7087E+00	-0.5745E+00	0.1719E+04	0.4147E+02	0.3117E+01
1	TEMP	5 SIGT	-0.2741E-01	-0.8447E+00	0.8273E+02	0.9095E+01	0.6837E+00
2	SAL	3 UC	0.4000E-01	0.2400E+00	0.9529E+04	0.9762E+02	0.7337E+01
2	SAL	4 VC	0.6903E-01	0.3422E+00	0.1393E+05	0.1180E+03	0.8871E+01
2	SAL	5 SIGT	0.2982E-02	0.5621E+00	0.1804E+02	0.4247E+01	0.3193E+00
3	UC	4 VC	0.2507E-01	0.2739E-02	0.2277E+03	0.1509E+02	0.1134E+01
3	UC	5 SIGT	0.7933E-01	0.3295E+00	0.5474E+04	0.7399E+02	0.5561E+01
4	VC	5 SIGT	0.1911E+00	0.6558E+00	0.8001E+04	0.8945E+02	0.6723E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
3	4	0.4576E+01	0.9321E+01	0.3053E+01	0.2295E+00	152.32

FILE: NEADS SITE 1 276405/A 024 MOORING ID: 276405 START-CYCLE: 1. STOP-CYCLE: 177. NUMBER OF VALUES: 177.

TIME RANGE: 22. 4.1983 23:30: 0: 0/15.10.1983 23:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 675 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.1012E+02	0.1098E+02	0.1060E+02	0.1782E-01	0.5623E-01	0.2371E+00	-0.6036E+00	0.2175E+01
2	SAL	[PPT]	0.3548E+02	0.3564E+02	0.3551E+02	0.2018E-02	0.7210E-03	0.2685E-01	0.2739E+01	0.1170E+02
3	UC	[CM/S]	-0.4719E+01	0.6203E+01	0.1949E+01	0.1670E+00	0.4937E+01	0.2222E+01	-0.8996E+00	0.3270E+01
4	VC	[CM/S]	-0.7149E+01	0.3369E+01	-0.2420E+01	0.2028E+00	0.7278E+01	0.2698E+01	0.1683E+00	0.1888E+01
5	SIGT	[ ]	0.2721E+02	0.2734E+02	0.2726E+02	0.2692E-02	0.1283E-02	0.3582E-01	0.3963E+00	0.1940E+01

	VARIABLES		COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	TEMP	2 SAL	0.3378E-02	0.5306E+00	0.7353E+02	0.8575E+01	0.6445E+00
1	TEMP	3 UC	0.2701E-01	0.5127E-01	0.5647E+03	0.2376E+02	0.1786E+01
1	TEMP	4 VC	-0.4218E+00	-0.6593E+00	0.8227E+03	0.2868E+02	0.2156E+01
1	TEMP	5 SIGT	-0.7392E-02	-0.8703E+00	0.3773E+02	0.6143E+01	0.4617E+00
2	SAL	3 UC	0.9277E-02	0.1555E+00	0.6227E+04	0.7891E+02	0.5931E+01
2	SAL	4 VC	-0.1470E-01	-0.2030E+00	0.9177E+04	0.9580E+02	0.7200E+01
2	SAL	5 SIGT	-0.4266E-04	-0.4435E-01	0.2072E+01	0.1439E+01	0.1082E+00
3	UC	4 VC	-0.5646E+00	-0.9419E-01	0.1009E+03	0.1005E+02	0.7551E+00
3	UC	5 SIGT	0.2522E-02	0.3169E-01	0.3666E+04	0.6055E+02	0.4551E+01
4	VC	5 SIGT	0.6345E-01	0.6567E+00	0.5407E+04	0.7353E+02	0.5527E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
3	4	0.3107E+01	0.6108E+01	0.2471E+01	0.1858E+00	141.16

FILE: NEADS SITE 1 276406/A 024 MOORING ID: 276406 START-CYCLE: 1. STOP-CYCLE: 177. NUMBER OF VALUES: 177.

TIME RANGE: 22. 4.1983 23:30: 0: 0/15.10.1983 23:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 1075 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.8150E+01	0.8820E+01	0.8410E+01	0.1181E-01	0.2470E-01	0.1572E+00	0.5503E+00	0.2403E+01
2	SAL	[PPT]	0.3548E+02	0.3567E+02	0.3556E+02	0.3352E-02	0.1989E-02	0.4460E-01	0.3417E+00	0.2295E+01
3	UC	[CM/S]	-0.3111E+01	0.1906E+01	0.1050E-01	0.7893E-01	0.1103E+01	0.1050E+01	-0.7106E+00	0.3134E+01
4	VC	[CM/S]	-0.3687E+01	0.2026E+01	-0.8367E+00	0.1009E+00	0.1804E+01	0.1343E+01	0.2193E+00	0.2321E+01
5	SIGT	[ ]	0.2762E+02	0.2773E+02	0.2767E+02	0.1489E-02	0.3925E-03	0.1981E-01	0.2033E+00	0.2958E+01

	VARIABLES		COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	TEMP	2 SAL	0.5844E-02	0.8338E+00	0.3490E+02	0.5908E+01	0.4441E+00
1	TEMP	3 UC	-0.1891E-01	-0.1146E+00	0.7814E+02	0.8840E+01	0.6644E+00
1	TEMP	4 VC	-0.1625E-01	-0.7698E-01	0.1268E+03	0.1126E+02	0.8465E+00
1	TEMP	5 SIGT	0.7016E-03	0.2253E+00	0.1927E+02	0.4389E+01	0.3299E+00
2	SAL	3 UC	-0.1384E-01	-0.2955E+00	0.1395E+04	0.3735E+02	0.2808E+01
2	SAL	4 VC	-0.8111E-02	-0.1354E+00	0.2280E+04	0.4775E+02	0.3589E+01
2	SAL	5 SIGT	0.6412E-03	0.7257E+00	0.3281E+01	0.1811E+01	0.1362E+00
3	UC	4 VC	-0.4728E+00	-0.3352E+00	0.2633E+01	0.1623E+01	0.1220E+00
3	UC	5 SIGT	-0.7845E-02	-0.3772E+00	0.6448E+03	0.2907E+02	0.2185E+01
4	VC	5 SIGT	-0.3851E-02	-0.1448E+00	0.1381E+04	0.3716E+02	0.2793E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
3	4	0.8368E+00	0.1453E+01	0.1205E+01	0.9061E-01	179.28

FILE: NEADS SITE 1 276408/A 024 MOORING ID: 276408 START-CYCLE: 1. STOP-CYCLE: 177. NUMBER OF VALUES: 177.

TIME RANGE: 22. 4.1983 23:30: 0: 0/15.10.1983 23:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.14400D+04 1575 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	SAL	[PPT]	0.3516E+02	0.3536E+02	0.3521E+02	0.2616E-02	0.1211E-02	0.3480E-01	0.8883E+00	0.4050E+01
2	TEMP	[DEG.C]	0.5088E+01	0.5566E+01	0.5297E+01	0.8632E-02	0.1319E-01	0.1148E+00	0.4420E-00	0.2259E+01
3	UC	[CM/S]	-0.2814E+01	0.1805E+01	-0.4548E+00	0.8282E-01	0.1214E+01	0.1102E+01	-0.1126E+00	0.2004E+01
4	VC	[CM/S]	-0.3069E+01	0.2279E+01	-0.3649E+00	0.9212E-01	0.1502E+01	0.1226E+01	-0.3984E-01	0.2115E+01
5	SIGT	[ ]	0.2779E+02	0.2792E+02	0.2783E+02	0.1366E-02	0.3303E-03	0.1817E-01	0.8968E+00	0.4979E+01

	VARIABLES		COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	SAL	2 TEMP	0.3228E-02	0.8077E+00	0.1761E+02	0.4196E+01	0.3154E+00
1	SAL	3 UC	-0.1382E-01	-0.3606E+00	0.1506E+04	0.3880E+02	0.2917E+01
1	SAL	4 VC	0.2703E-02	0.8338E-01	0.1863E+04	0.4318E+02	0.3244E+01
1	SAL	5 SIGT	0.5651E-03	0.8936E+00	0.2456E+01	0.1567E+01	0.1178E+00
2	TEMP	3 UC	-0.4108E-01	-0.3246E+00	0.3404E+02	0.5834E+01	0.4385E+00
2	TEMP	4 VC	-0.2341E-01	-0.1663E+00	0.4241E+02	0.6512E+01	0.4895E+00
2	TEMP	5 SIGT	0.9554E-03	0.4577E+00	0.1051E+02	0.3242E+01	0.2437E+00
3	UC	4 VC	-0.2994E+00	-0.2217E+00	0.1155E+01	0.1075E+01	0.8077E-01
3	UC	5 SIGT	-0.5922E-02	-0.2957E+00	0.9404E+03	0.3067E+02	0.2305E+01
	VC	5 SIGT	0.4954E-02	0.2224E+00	0.1163E+04	0.3411E+02	0.2564E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
3	4	0.5831E+00	0.1358E+01	0.1165E+01	0.8760E-01	231.26

FILE: NEADS SITE 1 276409/A 024 MOORING ID: 276409 START-CYCLE: 1. STOP-CYCLE: 177. NUMBER OF VALUES: 177.

TIME RANGE: 22. 4.1983 23:30: 0: 0/15.10.1983 23:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.14400D+04 2980 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.2783E+01	0.2862E+01	0.2806E+01	0.1173E-02	0.2436E-03	0.1561E-01	0.2346E+00	0.2139E+01
2	UC	[CM/S]	-0.6526E+01	0.1049E+01	-0.4547E+00	0.7991E-01	0.1130E+01	0.1063E+01	-0.1158E+01	0.7556E+01
3	VC	[CM/S]	-0.1650E+01	0.2460E+01	-0.3473E+00	0.6491E-01	0.7458E+00	0.8636E+00	0.9765E+00	0.3898E+01

	VARIABLES		COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	TEMP	2 UC	-0.3377E-02	-0.2035E+00	0.8993E+01	0.2999E+01	0.2254E+00
1	TEMP	3 VC	0.3786E-02	0.2809E+00	0.5913E+01	0.2432E+01	0.1828E+00
2	UC	3 VC	-0.4388E+00	-0.4779E+00	0.2394E+01	0.1547E+01	0.1163E+00

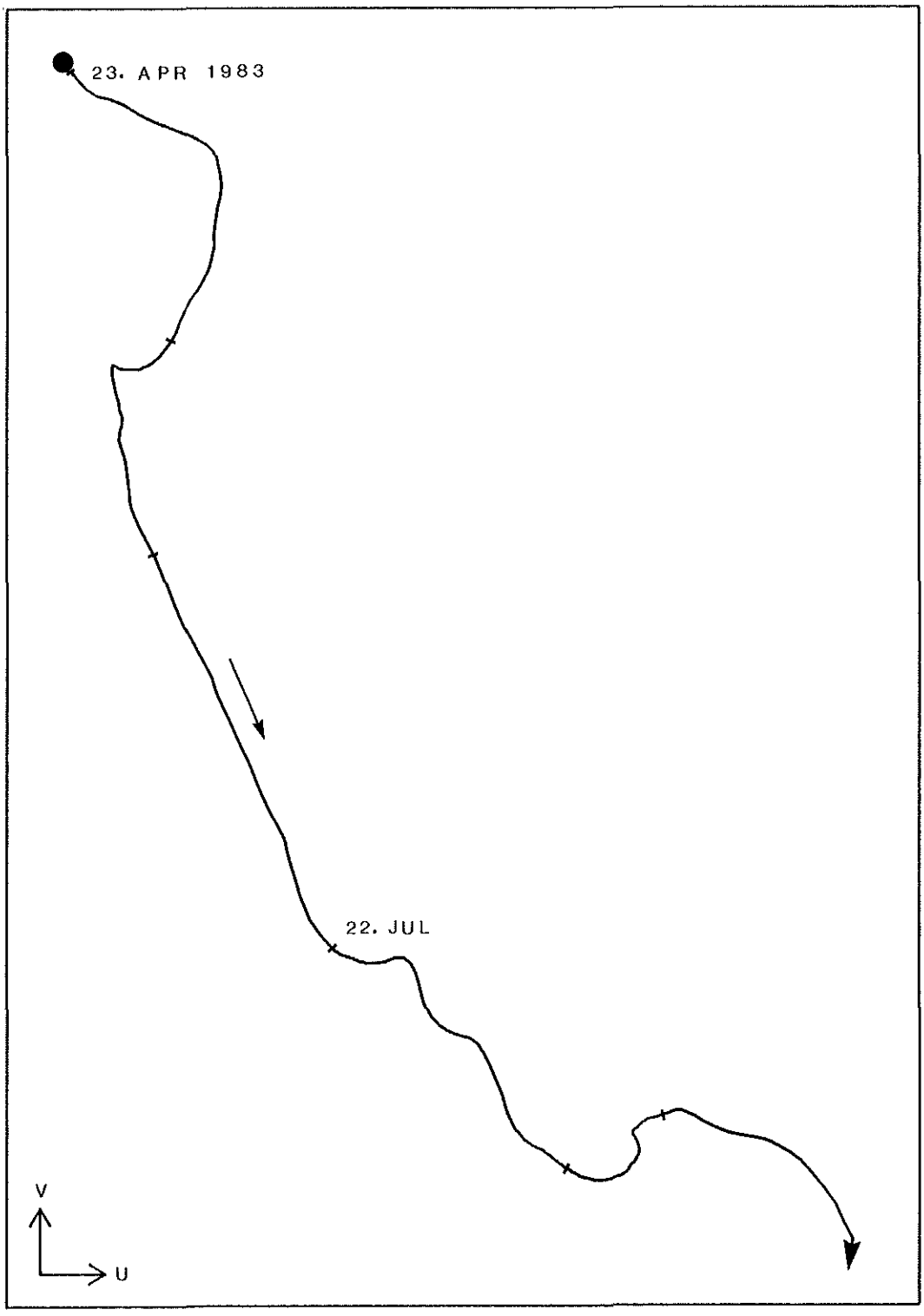
PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
2	3	0.5721E+00	0.9380E+00	0.9685E+00	0.7280E-01	232.62

FILE: NEADS SITE 1 276410/A 024 MOORING ID: 276410 START-CYCLE: 1. STOP-CYCLE: 177. NUMBER OF VALUES: 177.

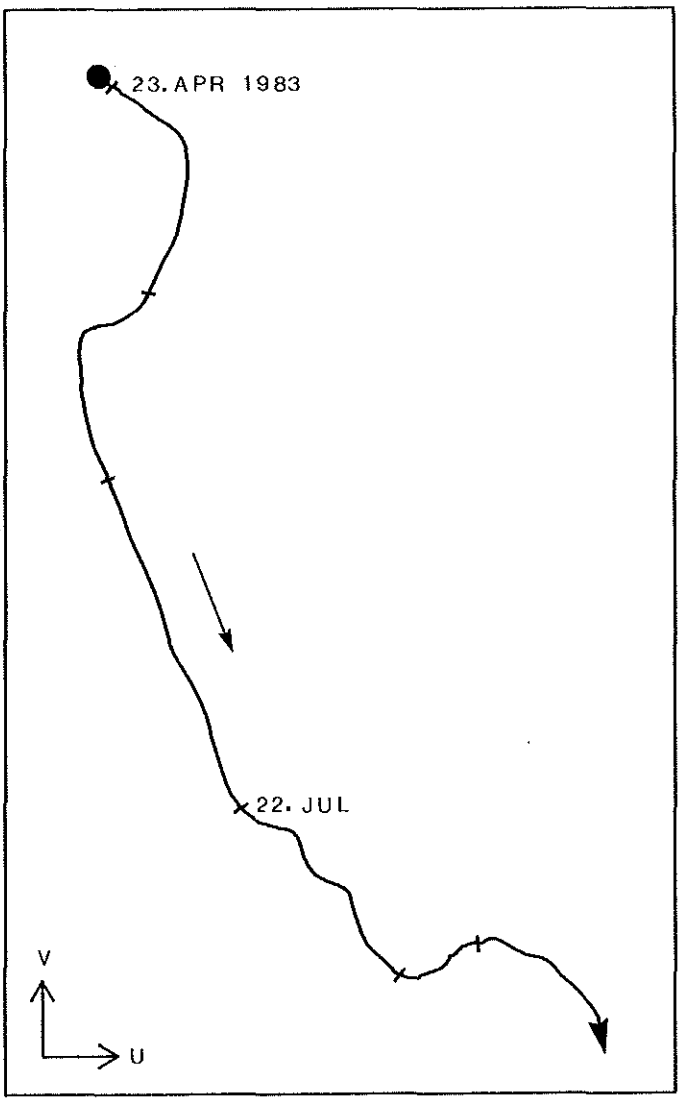
TIME RANGE: 22. 4.1983 23:30: 0: 0/15.10.1983 23:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.14400D+04 5185 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.2456E+01	0.2475E+01	0.2468E+01	0.4536E-03	0.3642E-04	0.6035E-02	-0.9273E+00	0.2308E+01

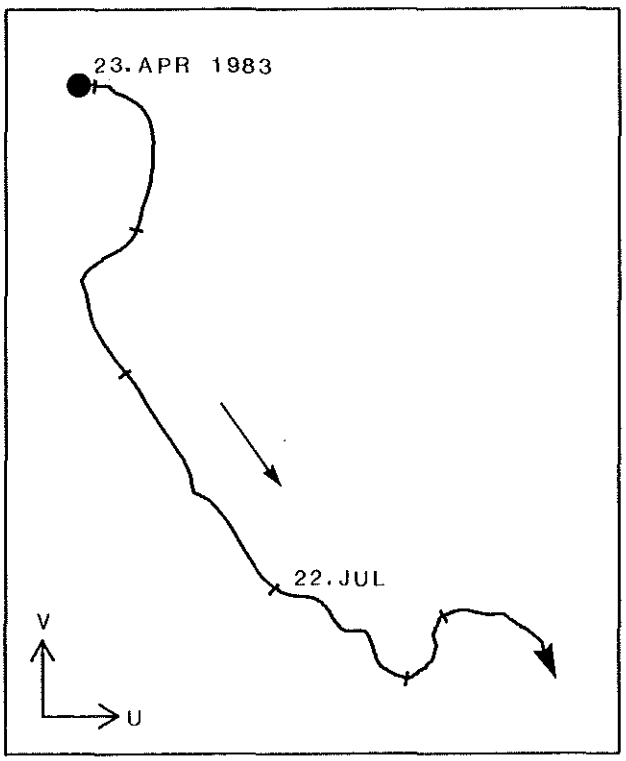
SITE 1 245 M



SITE 1 475 M

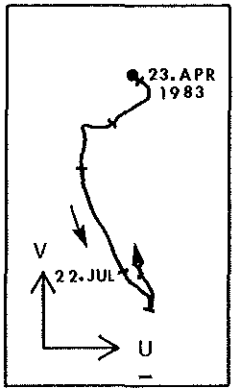


SITE 1 675 M



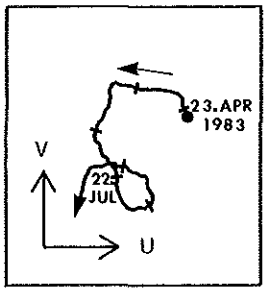
100 KM 3 CM/S

SITE 1 1075 M



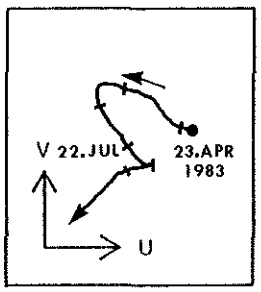
50 KM 1 CM/S

SITE 1 1575 M

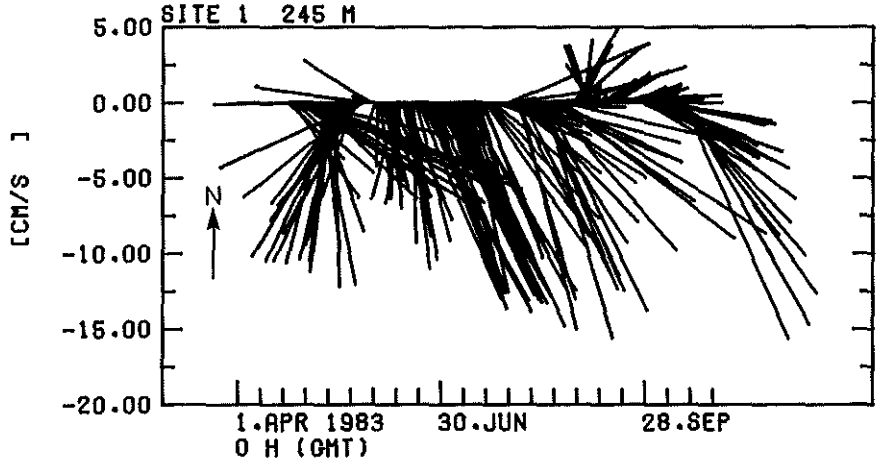


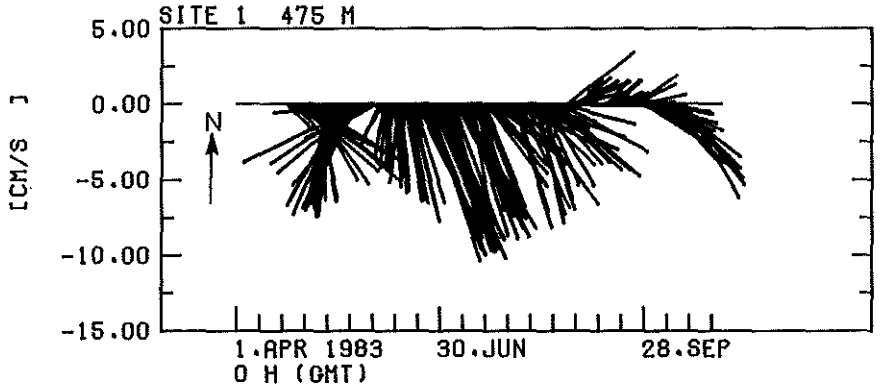
50 KM 1 CM/S

SITE 1 2980 M



50 KM 1 CM/S


SITE 1 245 M
5.00
0.00
-5.00
-10.00
-15.00
-20.00
[CM/S]
N
1.APR 1983
30.JUN
28.SEP
0 H (GMT)


SITE 1 475 M
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0.00
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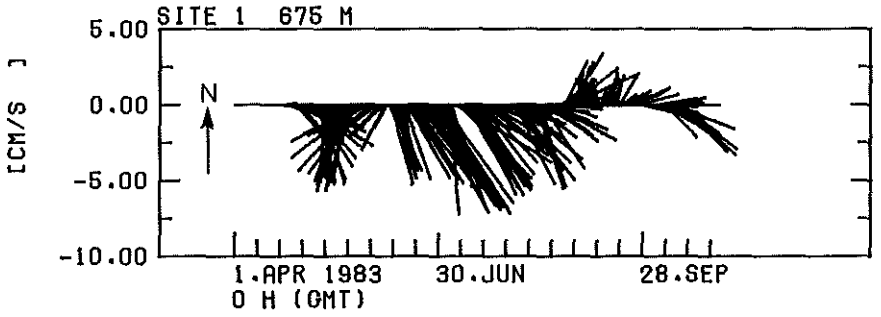
-10.00
-15.00
[CM/S]
N
1.APR 1983
30.JUN
28.SEP
0 H (GMT)


SITE 1 675 M
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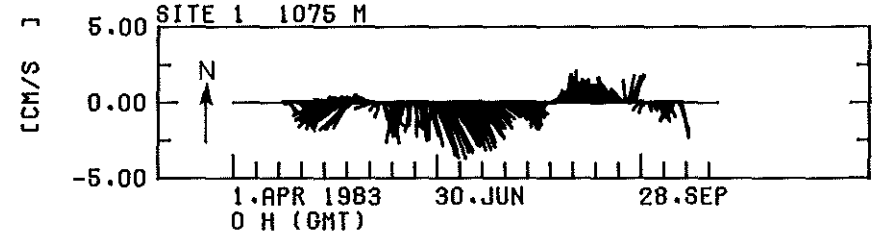
-5.00
-10.00
[CM/S]
N
1.APR 1983
30.JUN
28.SEP
0 H (GMT)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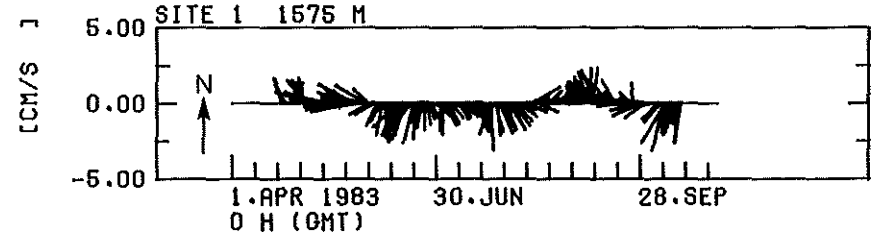
30.JUN
28.SEP
0 H (GMT)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[CM/S]
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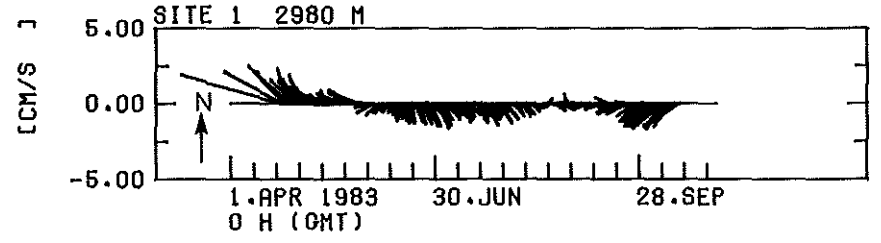
1.APR 1983
30.JUN
28.SEP
0 H (GMT)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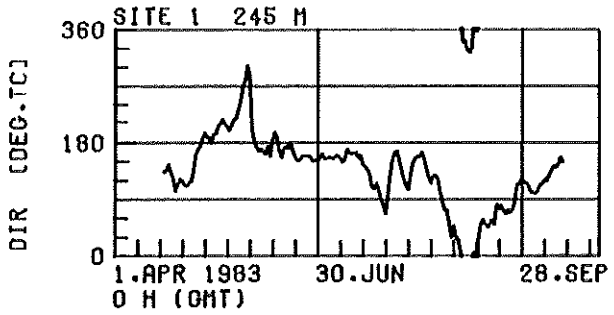
-5.00
[CM/S]
N
1.APR 1983
30.JUN
28.SEP
0 H (GMT)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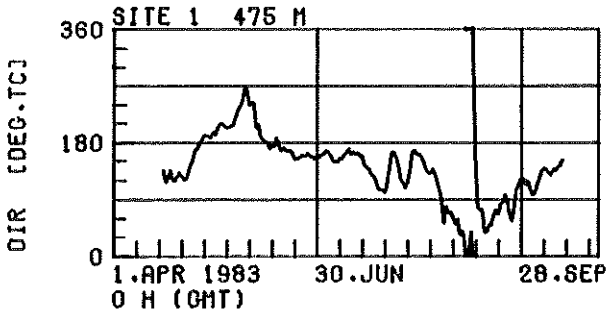
0
DIR [DEG.TC]
1.APR 1983
30.JUN
28.SEP
0 H (GMT)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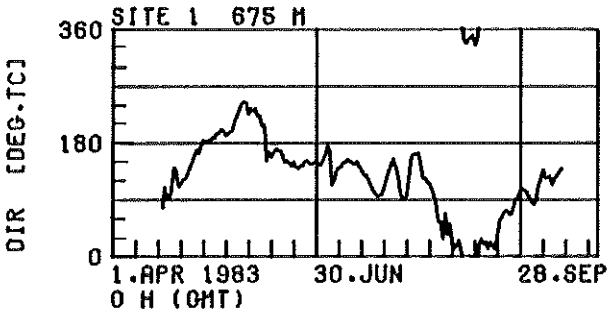
DIR [DEG.TC]
1.APR 1983
30.JUN
28.SEP
0 H (GMT)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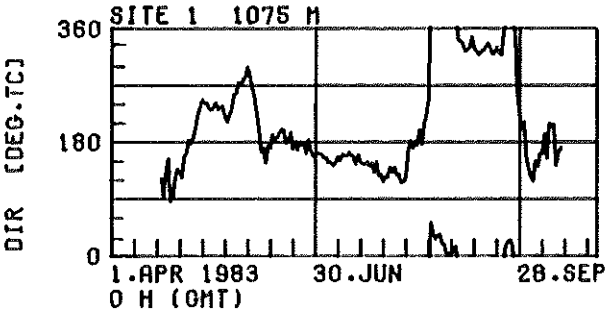
30.JUN
28.SEP
0 H (GMT)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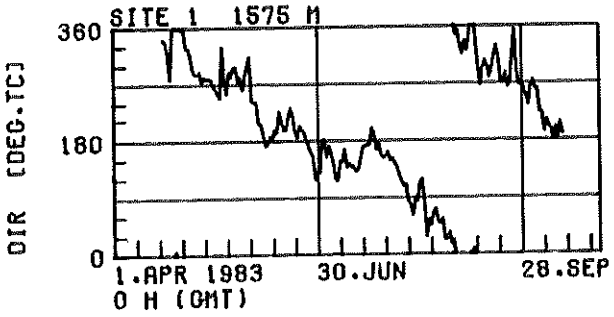
1.APR 1983
30.JUN
28.SEP
0 H (GMT)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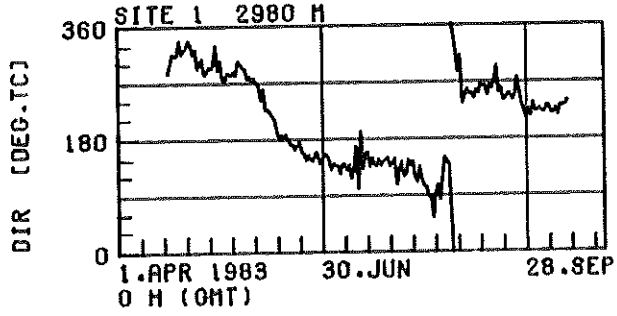
DIR [DEG.TC]
1.APR 1983
30.JUN
28.SEP
0 H (GMT)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360
180
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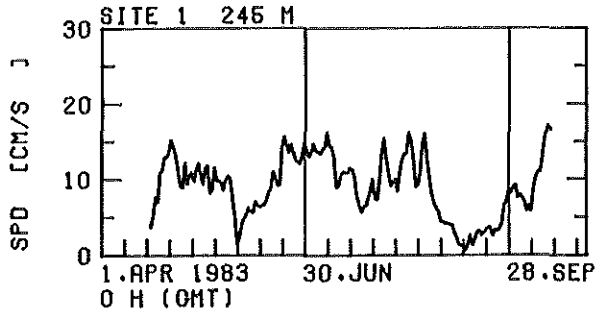
DIR [DEG.TC]
1.APR 1983
30.JUN
28.SEP
0 H (GMT)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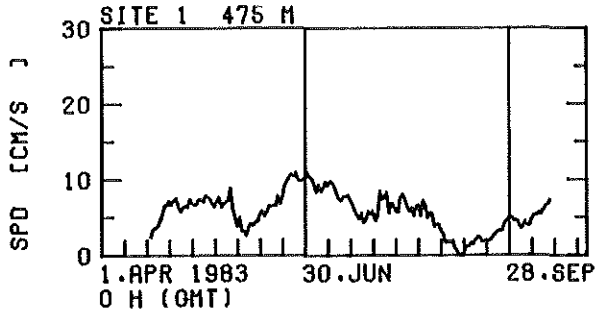
SPD [CM/S]
30
20
10
0
1.APR 1983
30.JUN
28.SEP
0 H (GMT)


SITE 1 475 M
SPD [CM/S]
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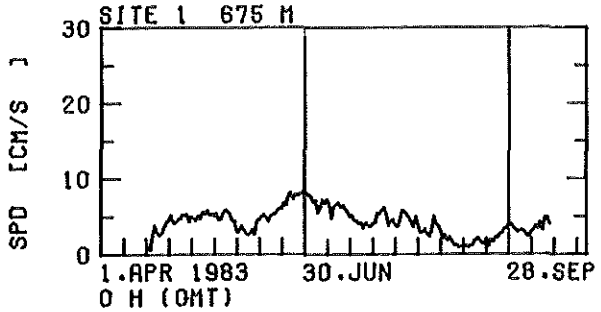
20
10
0
1.APR 1983
30.JUN
28.SEP
0 H (GMT)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SPD [CM/S]
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20
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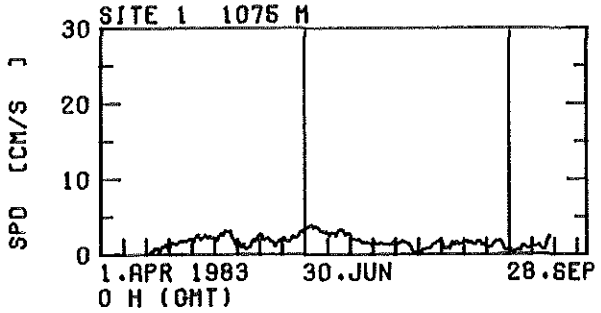
0
1.APR 1983
30.JUN
28.SEP
0 H (GMT)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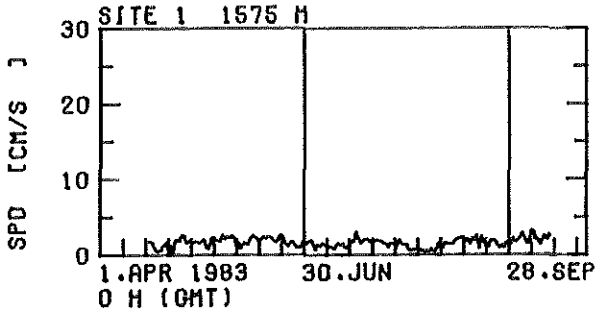
1.APR 1983
30.JUN
28.SEP
0 H (GMT)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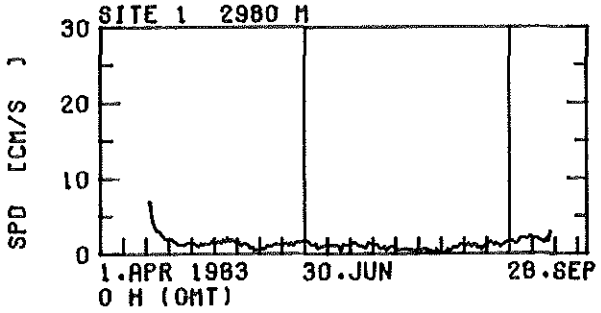
30.JUN
28.SEP
0 H (GMT)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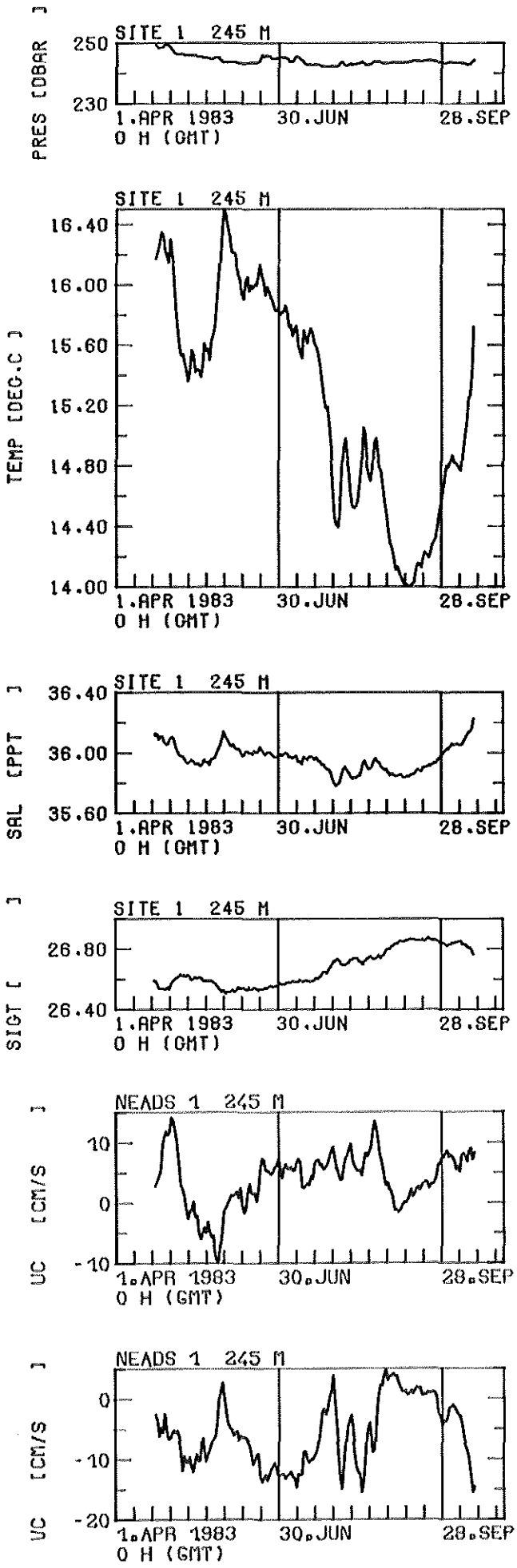
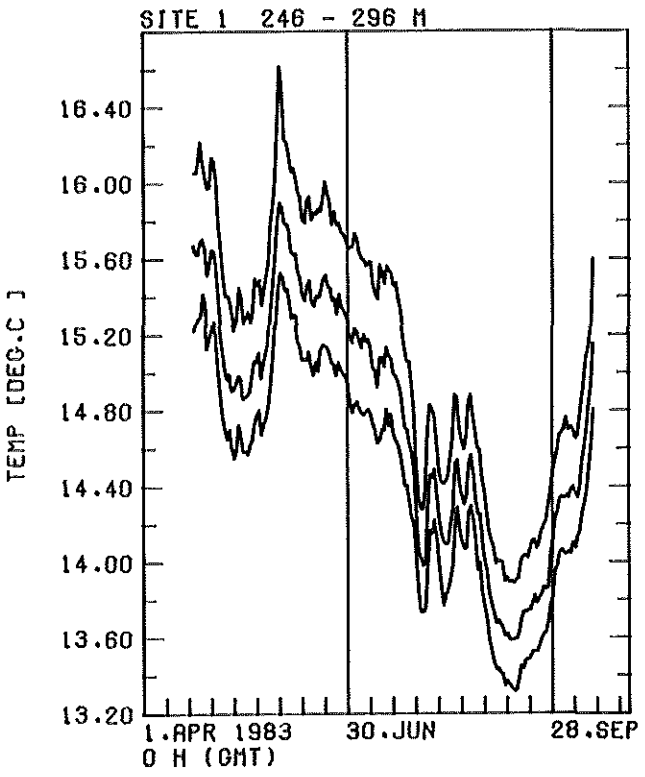
1.APR 1983
30.JUN
28.SEP
0 H (GMT)


SITE 1 245 M
PRES [DBAR]
250
230
1.APR 1983
30.JUN
28.SEP
0 H (GMT)
SITE 1 245 M
TEMP [DEG.C]
16.40
16.00
15.60
15.20
14.80
14.40
14.00
1.APR 1983
30.JUN
28.SEP
0 H (GMT)
SITE 1 245 M
SAL [PPT]
36.40
36.00
35.60
1.APR 1983
30.JUN
28.SEP
0 H (GMT)
SITE 1 245 M
SIGT [ ]
26.80
26.40
1.APR 1983
30.JUN
28.SEP
0 H (GMT)
NEADS 1 245 M
UC [CM/S]
10
0
-10
1.APR 1983
30.JUN
28.SEP
0 H (GMT)
NEADS 1 245 M
VC [CM/S]
0
-10
-20
1.APR 1983
30.JUN
28.SEP
0 H (GMT)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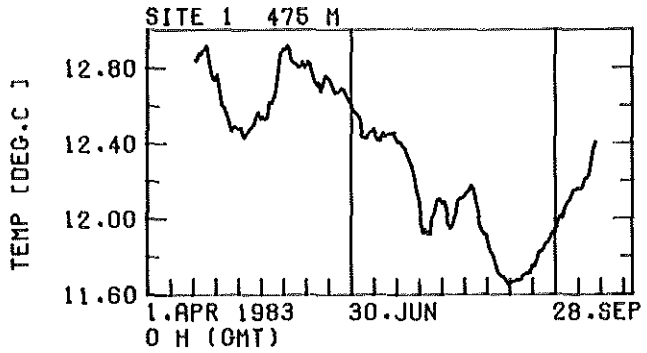
15.20
14.80
14.40
14.00
13.60
13.20
TEMP [DEG.C]
1.APR 1983
0 H (GMT)
30.JUN
28.SEP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30.JUN
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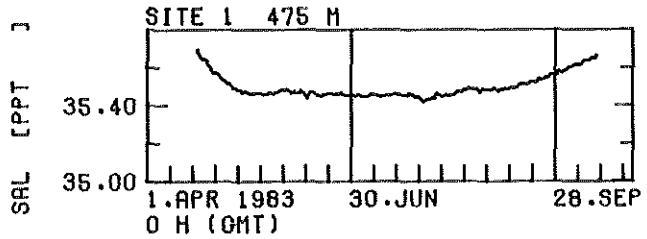
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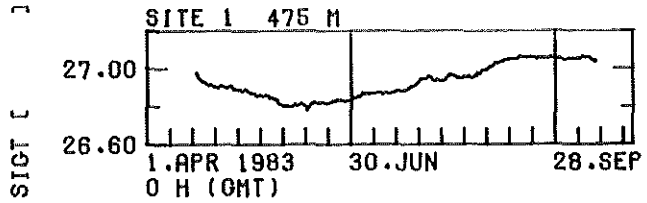
SITE 1 475 M
SIGT [ ]
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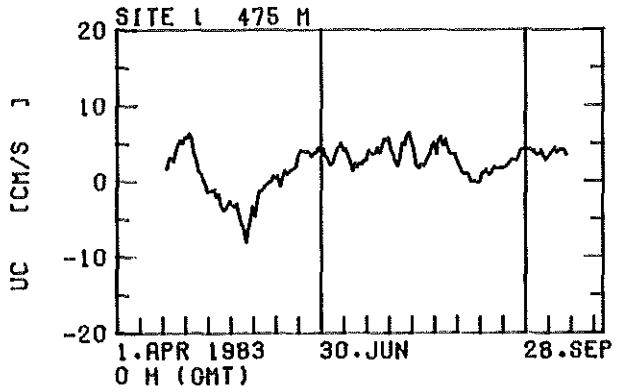
26.60
1.APR 1983
30.JUN
28.SEP
0 H (GMT)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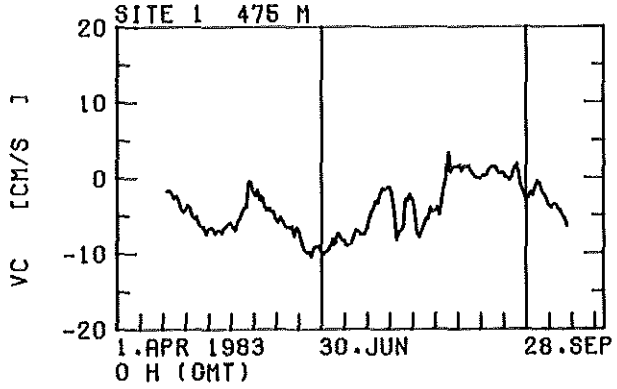
10
0
-10
-20
1.APR 1983
30.JUN
28.SEP
0 H (GMT)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VC [CM/S]
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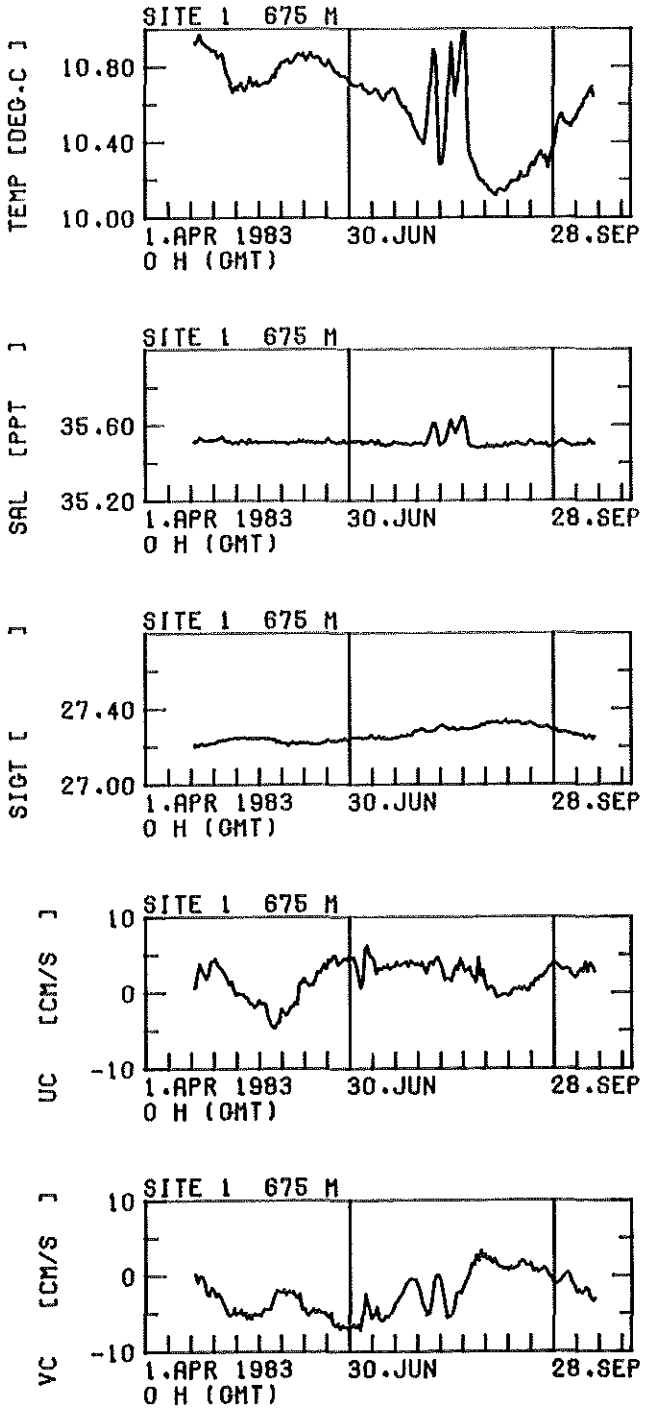
1.APR 1983
30.JUN
28.SEP
0 H (GMT)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0 H (GMT)
30.JUN
28.SEP
SITE 1 675 M
SAL [PPT]
35.60
35.20
1.APR 1983
0 H (GMT)
30.JUN
28.SEP
SITE 1 675 M
SIGT [ ]
27.40
27.00
1.APR 1983
0 H (GMT)
30.JUN
28.SEP
SITE 1 675 M
UC [CM/S]
10
0
-10
1.APR 1983
0 H (GMT)
30.JUN
28.SEP
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VC [CM/S]
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0 H (GMT)
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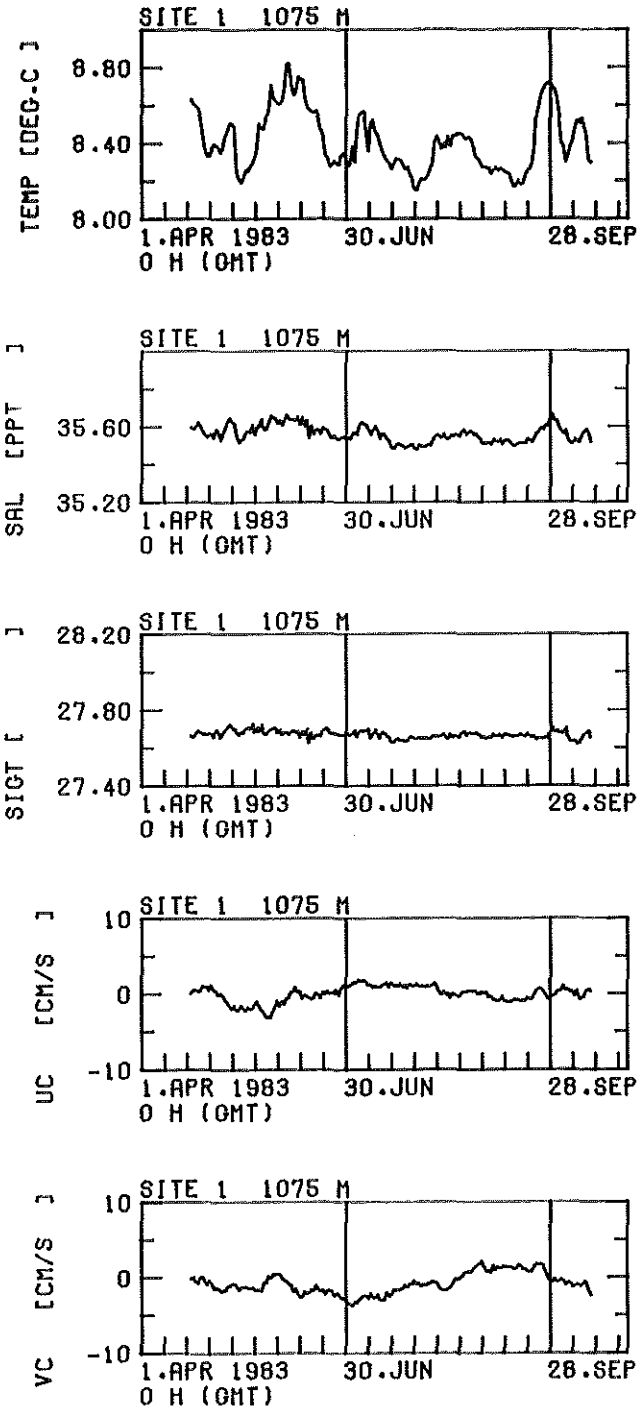
28.SEP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8.00
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0 H (GMT)
30.JUN
28.SEP
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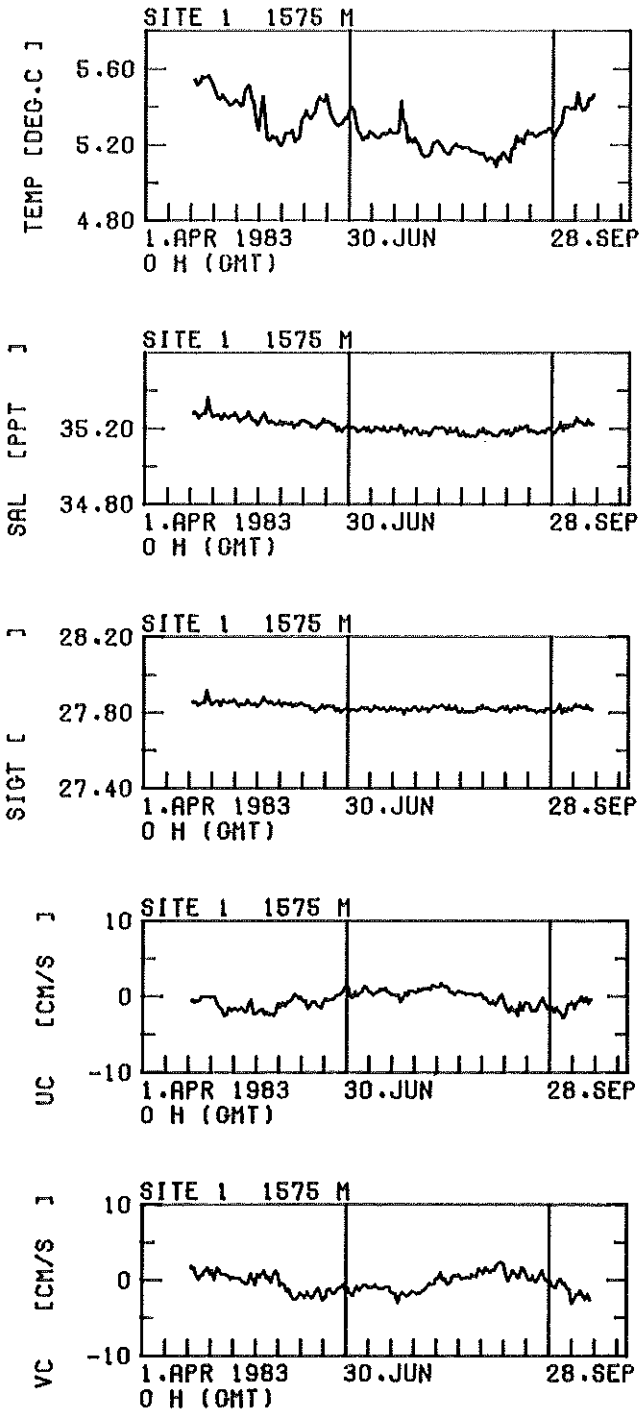
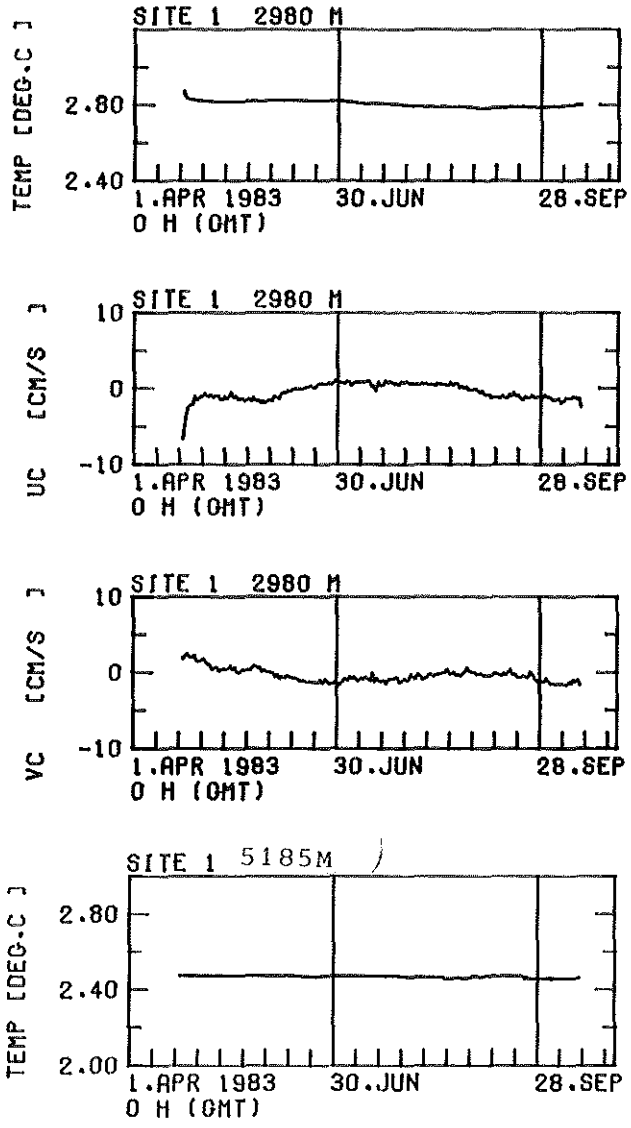
SAL [PPT]
35.60
35.20
1.APR 1983
0 H (GMT)
30.JUN
28.SEP
SITE 1 1075 M
SIGT [ ]
28.20
27.80
27.40
1.APR 1983
0 H (GMT)
30.JUN
28.SEP
SITE 1 1075 M
UC [CM/S]
10
0
-10
1.APR 1983
0 H (GMT)
30.JUN
28.SEP
SITE 1 1075 M
VC [CM/S]
10
0
-10
1.APR 1983
0 H (GMT)
30.JUN
28.SEP


SITE 1 1575 M
TEMP [DEG.C]
5.60
5.20
4.80
1.APR 1983
30.JUN
28.SEP
0 H (GMT)
SITE 1 1575 M
SAL [PPT]
35.20
34.80
1.APR 1983
30.JUN
28.SEP
0 H (GMT)
SITE 1 1575 M
SIGT [ ]
28.20
27.80
27.40
1.APR 1983
30.JUN
28.SEP
0 H (GMT)
SITE 1 1575 M
UC [CM/S]
10
0
-10
1.APR 1983
30.JUN
28.SEP
0 H (GMT)
SITE 1 1575 M
VC [CM/S]
10
0
-10
1.APR 1983
30.JUN
28.SEP
0 H (GMT)


SITE 1 2980 M
TEMP [DEG.C]
2.80
2.40
1.APR 1983
0 H (GMT)
30.JUN
28.SEP
SITE 1 2980 M
UC [CM/S]
10
0
-10
1.APR 1983
0 H (GMT)
30.JUN
28.SEP
SITE 1 2980 M
VC [CM/S]
10
0
-10
1.APR 1983
0 H (GMT)
30.JUN
28.SEP
SITE 1 5185M
TEMP [DEG.C]
2.80
2.40
2.00
1.APR 1983
0 H (GMT)
30.JUN
28.SEP

277300

N11

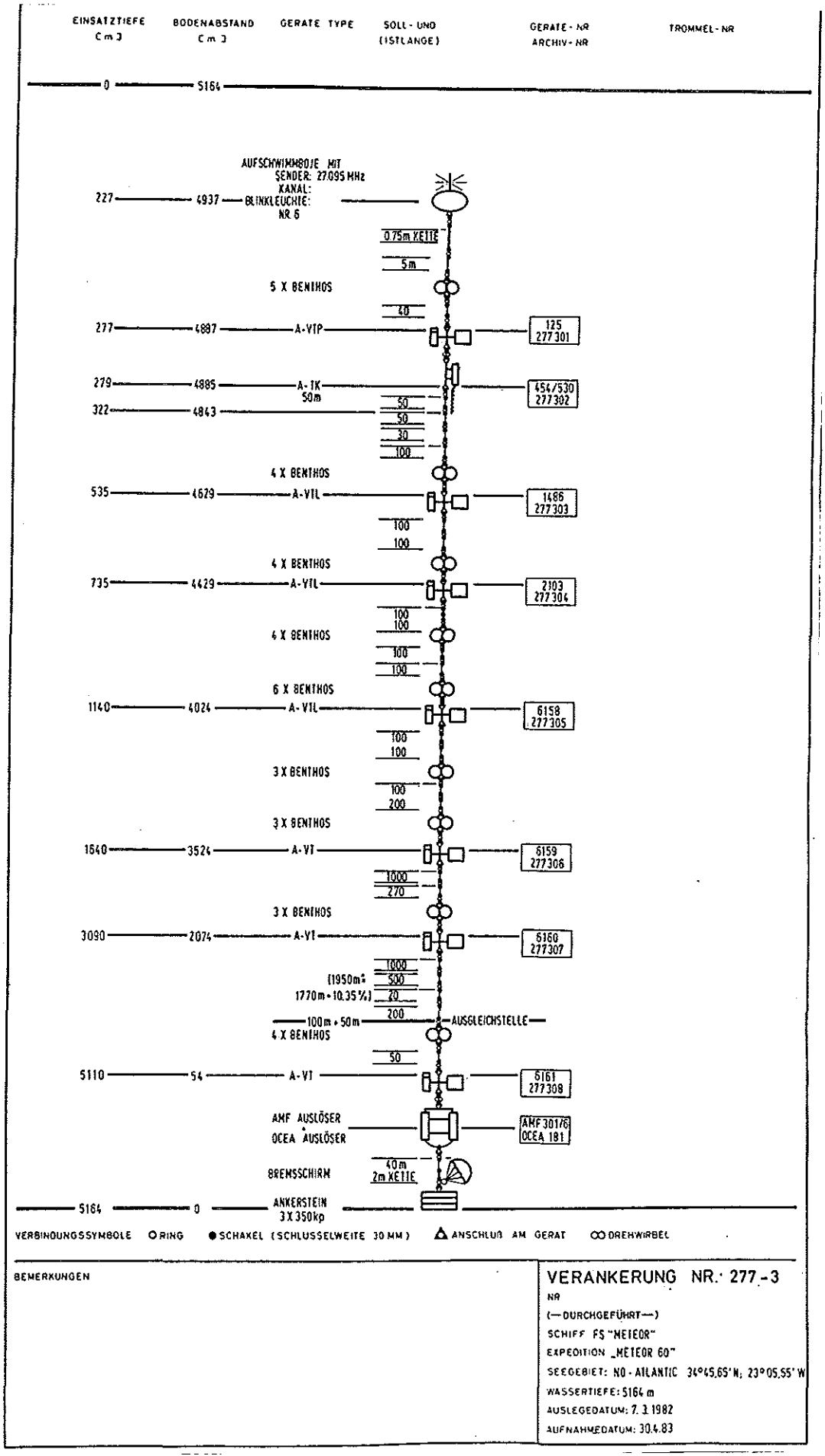
07 Mar 1982 - 30 Apr 1983

NEADS site 11, 34° 45.7'N, 23° 05.6'W, water depth 5164 m
IfM mooring No 277300
Deployed: 07 Mar 1982, Meteor 60/3
Recovered: 30 Apr 1983, Meteor 64/6
Start of record: 07 Mar 1982, 2100Z.
End of record: 30 Apr 1983, 0700Z.
Recording interval: 60 min except thermistor-chain (120 min)
Time base check: ok with exceptions

277301: no final flag.
277302: 2 cycles skipped.
277304: 47 cycles skipped.
277307: Data bad after cycle 9073, no final flag
277308: 179 cycles missed, recording interval approbiately increased.

Identification	depth (m)	Parameters and corrections P	T	C	$\vec{u}$	ϕ	Remarks
277301	277	+2	x	-	x	x	Rotor lost after cycle 3744, tape out after cycle 9365
302	281-332	-	x	-	-	-	11 thermistors
303	535	-	0.29	x	x	x	$C=C+(cycle-1)*3.39x10^{-5}-0.05$
304	735	-	x	x	-	x	$C=C+(cycle-1)*4.98x10^{-5}-0.15$ no velocity data
305	1140	-6	x	x	x	x	$C=C+(cycle-1)*3.29x10^{-5}+0.53$
306	1640	-	x	-	x	x	
307	3090	-	-0.04	-	x	x	Stop after cycle 9073
308	5110	-	-	-	-	x	

Symbols see page
Values for linear corrections are included.



BEMERKUNGEN

VERANKERUNG NR. 277-3

NR
(—DURCHGEFÜHRT—)
SCHIFF FS "METEOR"
EXPEDITION „METEOR 60"
SEEGEBIET: NO-ATLANTIC 34°45,65'N; 23°05,55'W
WASSERTIEFE: 5164 m
AUSLEGEDATUM: 7. 3. 1982
AUFNAHMEDATUM: 30.4.83

FILE: NEADS11 277301UVC/E2 MOORING ID: 277301 START-CYCLE: 1. STOP-CYCLE: 3744. NUMBER OF VALUES: 3744.

TIME RANGE: 7. 3.1982 21: 0: 0: 0/10. 8.1982 20: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.60000D+02 277 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	PRES	[DBAR]	0.2671E+03	0.2953E+03	0.2697E+03	0.5744E-01	0.1235E+02	0.3515E+01	0.3300E+01	0.1522E+02
2	TEMP	[DEG.C]	0.1242E+02	0.1430E+02	0.1307E+02	0.3949E-02	0.5840E-01	0.2417E+00	0.1172E+01	0.6153E+01
3	UC	[CM/S]	-0.2146E+02	0.1677E+02	-0.1426E+01	0.8245E-01	0.2545E+02	0.5045E+01	-0.4275E-02	0.3551E+01
4	VC	[CM/S]	-0.2428E+02	0.1041E+02	-0.3644E+01	0.8354E-01	0.2613E+02	0.5112E+01	-0.8103E+00	0.3930E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STOVECMEAN	VECMEANERR	DIR-MEAN
3	4	0.3913E+01	0.2579E+02	0.5079E+01	0.8300E-01	201.38

FILE: NEADS11 277301 /E2 MOORING ID: 277301 START-CYCLE: 1. STOP-CYCLE: 9365. NUMBER OF VALUES: 9365.

TIME RANGE: 7. 3.1982 21: 0: 0: 0/ 2. 4.1983 1: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.60000D+02 277 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	PRES	[DBAR]	0.2650E+03	0.2953E+03	0.2683E+03	0.2914E-01	0.7955E+01	0.2820E+01	0.3722E+01	0.2206E+02
2	TEMP	[DEG.C]	0.1242E+02	0.1441E+02	0.1338E+02	0.3651E-02	0.1249E+00	0.3533E+00	-0.7876E-02	0.2122E+01

FILE: NEADS11 277302 /E3 MOORING ID: 277302 START-CYCLE: 1. STOP-CYCLE: 5024. NUMBER OF VALUES: [illegible].

TIME RANGE: 7. 3.1982 21: 0: 0: 0/30. 4.1983 07: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.12000D+03 281-331 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.1250E+02	0.1423E+02	0.1338E+02	0.4585E-02	0.1056E+00	0.3250E+00	-0.7485E-01	0.2142E+01
2	TEMP	[DEG.C]	0.1245E+02	0.1414E+02	0.1334E+02	0.4540E-02	0.1035E+00	0.3218E+00	-0.8140E-01	0.2173E+01
3	TEMP	[DEG.C]	0.1240E+02	0.1411E+02	0.1328E+02	0.4476E-02	0.1007E+00	0.3173E+00	-0.8589E-01	0.2190E+01
4	TEMP	[DEG.C]	0.1238E+02	0.1404E+02	0.1321E+02	0.4410E-02	0.9770E-01	0.3126E+00	-0.8729E-01	0.2199E+01
5	TEMP	[DEG.C]	0.1235E+02	0.1397E+02	0.1315E+02	0.4342E-02	0.9470E-01	0.3077E+00	-0.8913E-01	0.2210E+01
6	TEMP	[DEG.C]	0.1231E+02	0.1392E+02	0.1311E+02	0.4283E-02	0.9218E-01	0.3036E+00	-0.8429E-01	0.2210E+01
7	TEMP	[DEG.C]	0.1221E+02	0.1385E+02	0.1304E+02	0.4216E-02	0.8929E-01	0.2988E+00	-0.8002E-01	0.2233E+01
8	TEMP	[DEG.C]	0.1217E+02	0.1378E+02	0.1297E+02	0.4140E-02	0.8611E-01	0.2934E+00	-0.7376E-01	0.2246E+01
9	TEMP	[DEG.C]	0.1212E+02	0.1373E+02	0.1293E+02	0.4088E-02	0.8395E-01	0.2897E+00	-0.7654E-01	0.2249E+01
10	TEMP	[DEG.C]	0.1207E+02	0.1368E+02	0.1288E+02	0.4019E-02	0.8116E-01	0.2849E+00	-0.7016E-01	0.2263E+01
11	TEMP	[DEG.C]	0.1207E+02	0.1359E+02	0.1283E+02	0.3939E-02	0.7794E-01	0.2792E+00	-0.7541E-01	0.2275E+01

FILE: NEADS11 277303UVC/TR MOORING ID: 277303 START-CYCLE: 1. STOP-CYCLE:10043. NUMBER OF VALUES:10043.

TIME RANGE: 7. 3.1982 21: 0: 0: 0/30. 4.1983 7: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000D+02 535 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.1053E+02	0.1179E+02	0.1118E+02	0.1665E-02	0.2783E-01	0.1668E+00	-0.2448E+00	0.3247E+01
2	SAL	[PPT]	0.3525E+02	0.3598E+02	0.3547E+02	0.7419E-03	0.5528E-02	0.7435E-01	0.1006E+01	0.5341E+01
3	UC	[CM/S]	-0.2394E+02	0.1697E+02	-0.2137E+01	0.4973E-01	0.2484E+02	0.4984E+01	-0.9910E-01	0.3669E+01
4	VC	[CM/S]	-0.2034E+02	0.1653E+02	-0.1040E+01	0.4831E-01	0.2344E+02	0.4842E+01	-0.1764E+00	0.3579E+01
5	SIGT	[ ]	0.2695E+02	0.2749E+02	0.2713E+02	0.7191E-03	0.5193E-02	0.7206E-01	0.5391E+00	0.3339E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
3	4	0.2377E+01	0.2414E+02	0.4913E+01	0.4903E-01	244.06

FILE: NEADS11 277304 /E2 MOORING ID: 277304 START-CYCLE: 1. STOP-CYCLE:10043. NUMBER OF VALUES:10043.

TIME RANGE: 7. 3.1982 21: 0: 0: 0/30. 4.1983 7: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000D+02 735 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.9397E+01	0.1069E+02	0.1011E+02	0.1668E-02	0.2796E-01	0.1672E+00	-0.6197E+00	0.4479E+01
2	SAL	[PPT]	0.3529E+02	0.3571E+02	0.3550E+02	0.4653E-03	0.2175E-02	0.4663E-01	0.8393E-01	0.3310E+01
3	SIGT	[ ]	0.2716E+02	0.2756E+02	0.2734E+02	0.3999E-03	0.1606E-02	0.4007E-01	0.2643E+00	0.3861E+01

FILE: NEADS11 277305UVC/XX MOORING ID: 277305 START-CYCLE: 1. STOP-CYCLE:10043. NUMBER OF VALUES:10043.

TIME RANGE: 7. 3.1982 21: 0: 0: 0/30. 4.1983 7: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000D+02 1140 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	PRES	[DBAR]	0.1142E+04	0.1148E+04	0.1142E+04	0.8955E-02	0.8054E+00	0.8975E+00	0.6320E+01	0.4111E+02
2	TEMP	[DEG.C]	0.7603E+01	0.9824E+01	0.8537E+01	0.3296E-02	0.1091E+00	0.3304E+00	0.7323E+00	0.4234E+01
3	SAL	[PPT]	0.3541E+02	0.3601E+02	0.3565E+02	0.8391E-03	0.7071E-02	0.8409E-01	0.9712E+00	0.4665E+01
4	UC	[CM/S]	-0.1605E+02	0.1157E+02	-0.1247E+01	0.3910E-01	0.1535E+02	0.3918E+01	-0.3657E-01	0.2703E+01
5	VC	[CM/S]	-0.1561E+02	0.1437E+02	-0.2972E+00	0.4449E-01	0.1988E+02	0.4459E+01	0.1094E+00	0.2425E+01
6	SIGT	[ ]	0.2760E+02	0.2788E+02	0.2772E+02	0.3731E-03	0.1398E-02	0.3739E-01	0.3479E+00	0.2749E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
4	5	0.1282E+01	0.1762E+02	0.4197E+01	0.4188E-01	256.59

FILE: NEADS11 277306UVC/E1 MOORING ID: 277306 START-CYCLE: 1. STOP-CYCLE:10043. NUMBER OF VALUES:10043.

TIME RANGE: 7. 3.1982 21: 0: 0: 0/30. 4.1983 7: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 1640 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.4480E+01	0.5650E+01	0.4943E+01	0.2127E-02	0.4543E-01	0.2131E+00	0.4279E+00	0.2260E+01
2	UC	[CM/S]	-0.1109E+02	0.8160E+01	-0.4200E+00	0.2810E-01	0.7930E+01	0.2816E+01	0.1977E-01	0.2740E+01
3	VC	[CM/S]	-0.1168E+02	0.9340E+01	-0.2502E+00	0.2986E-01	0.8956E+01	0.2993E+01	-0.2757E-01	0.2582E+01

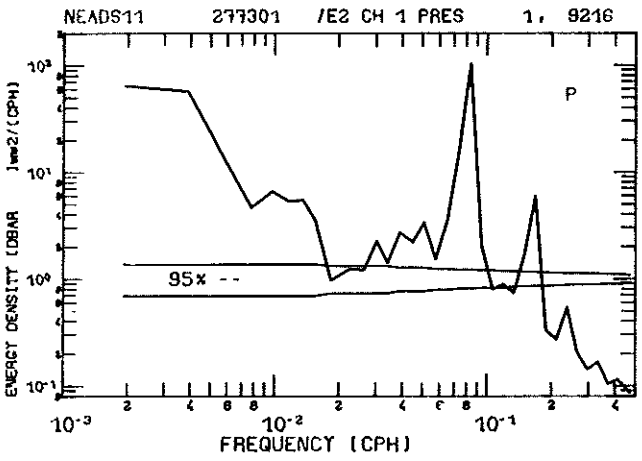
PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
2	3	0.4889E+00	0.8443E+01	0.2906E+01	0.2899E-01	239.21

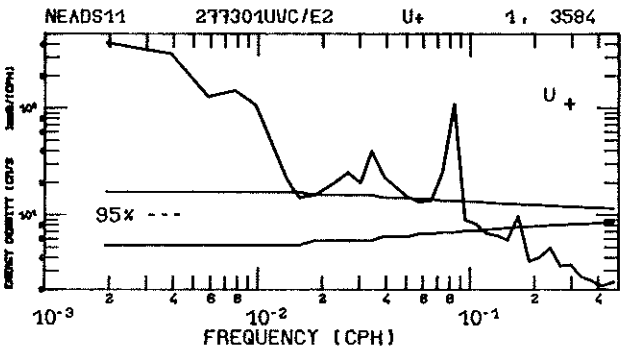
FILE: NEADS11 277307UVC/E1 MOORING ID: 277307 START-CYCLE: 1. STOP-CYCLE: 9073. NUMBER OF VALUES: 9073.

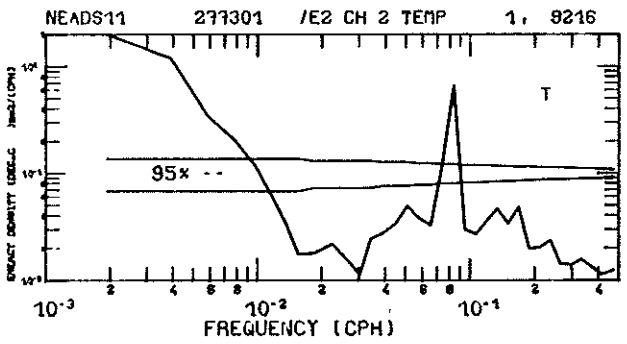
TIME RANGE: 7. 3.1982 21: 0: 0: 0/20. 3.1983 21: 0: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.600000+02 3090 m

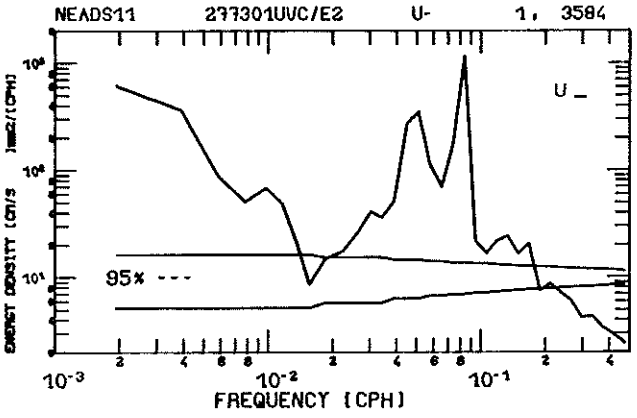
	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.2745E+01	0.2867E+01	0.2799E+01	0.1762E-03	0.2815E-03	0.1678E-01	0.1536E+00	0.3185E+01
2	UC	[CM/S]	-0.9986E+01	0.8436E+01	0.5350E+00	0.2192E-01	0.4358E+01	0.2088E+01	-0.3128E+00	0.3894E+01
3	VC	[CM/S]	-0.8904E+01	0.1135E+02	0.5252E+00	0.2703E-01	0.6627E+01	0.2574E+01	-0.2760E-01	0.2917E+01

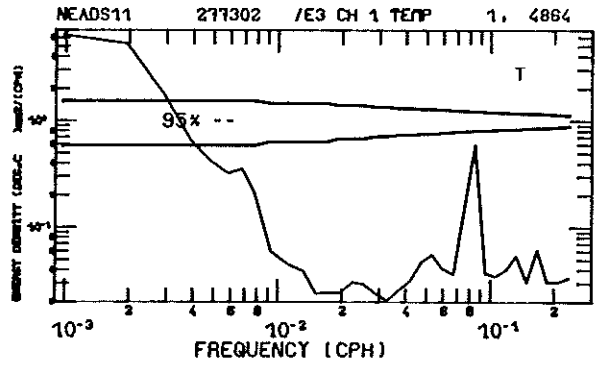
PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
2	3	0.7498E+00	0.5493E+01	0.2344E+01	0.2460E-01	45.53

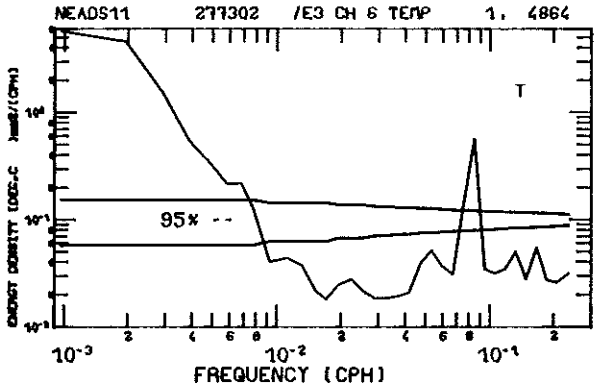

NEADS11 277301 /E2 CH 1 PRES 1, 9216
P
95% --
ENERGY DENSITY (DBAR
FREQUENCY (CPH)

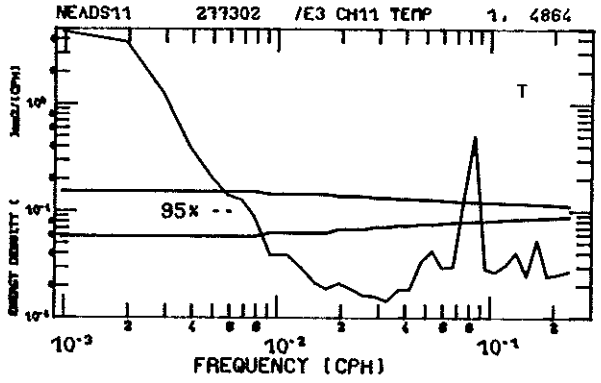

NEADS11 277301UVC/E2 U+ 1, 3584
U +
95% ---
FREQUENCY (CPH)


NEADS11 277301 /E2 CH 2 TEMP 1, 9216
T
95% --
FREQUENCY (CPH)


NEADS11 277301UVC/E2 U- 1, 3584
U _
95% ---
FREQUENCY (CPH)



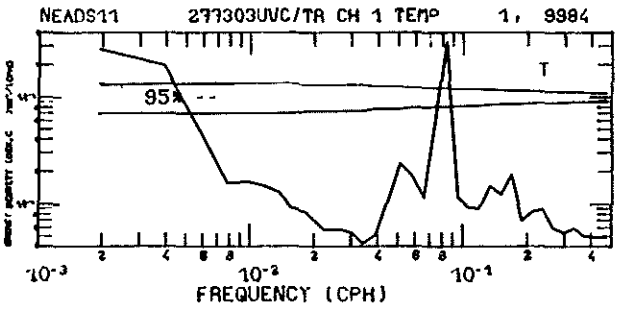


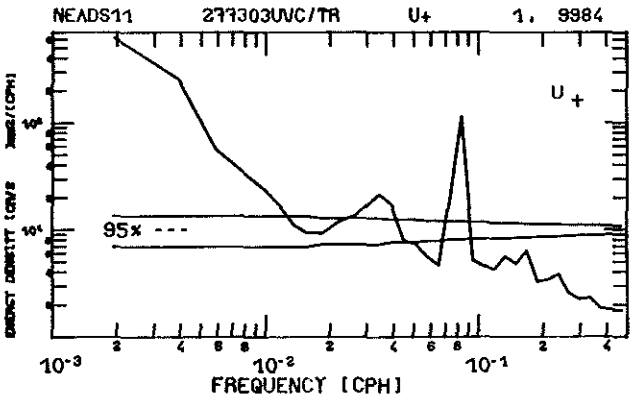


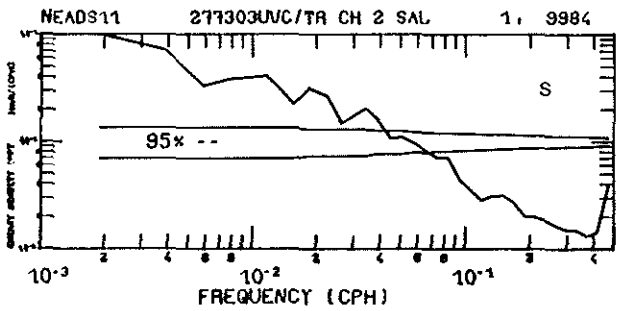
277302, 281m

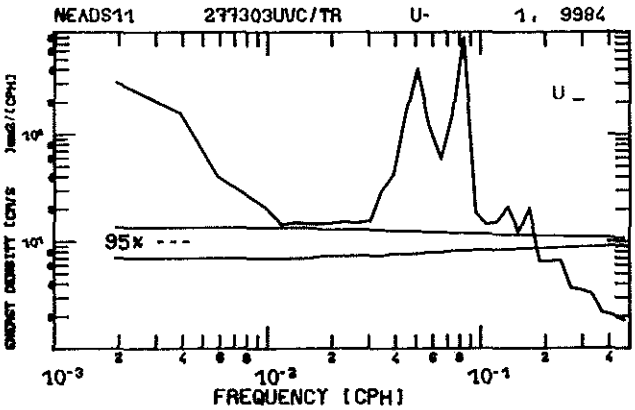
306m

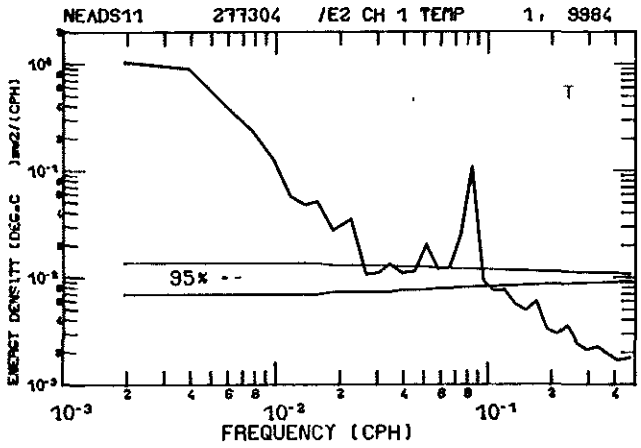
332m

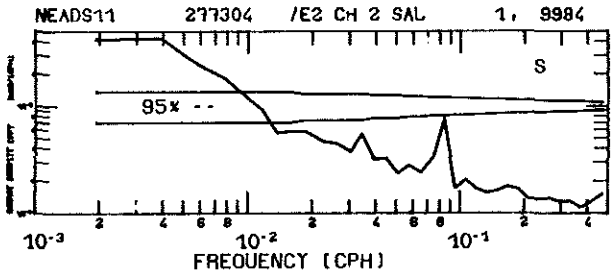

NEADS11 277303UVC/TR CH 1 TEMP 1, 9984
T
95% --
10⁻³
10⁻²
10⁻¹
FREQUENCY (CPH)


NEADS11 277303UVC/TR U+ 1, 9984
U +
95% ---
10⁻³
10⁻²
10⁻¹
FREQUENCY (CPH)

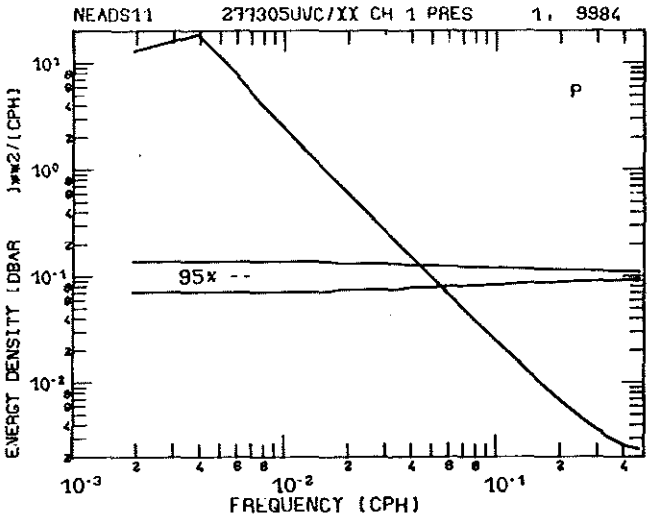

NEADS11 277303UVC/TR CH 2 SAL 1, 9984
S
95% --
10⁻³
10⁻²
10⁻¹
FREQUENCY (CPH)

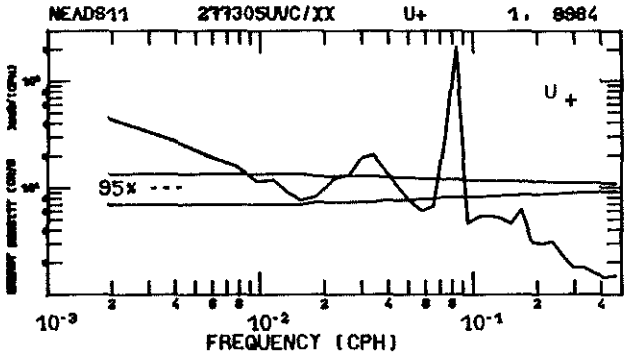

NEADS11 277303UVC/TR U- 1, 9984
U _
95% ---
10⁻³
10⁻²
10⁻¹
FREQUENCY (CPH)

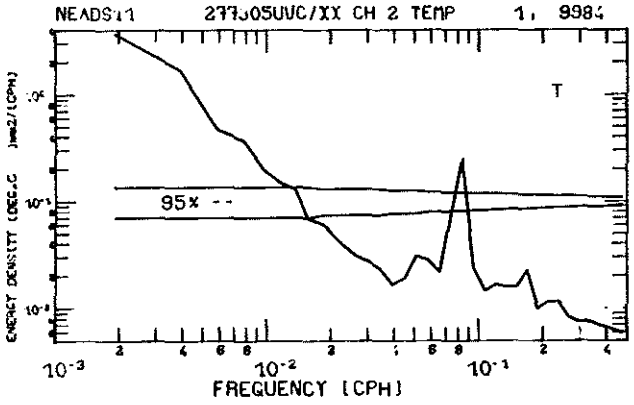

NEADS11 277304 /E2 CH 1 TEMP 1, 9984
T
95% --
10^{-3}
10^{-2}
10^{-1}
FREQUENCY (CPH)

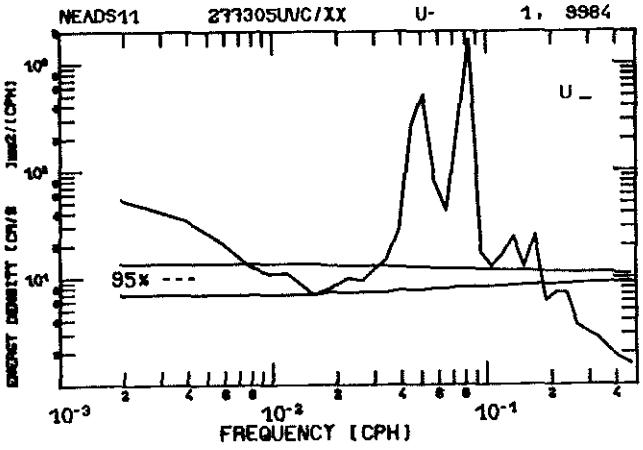

NEADS11 277304 /E2 CH 2 SAL 1, 9984
S
95% --
10^{-3}
10^{-2}
10^{-1}
FREQUENCY (CPH)

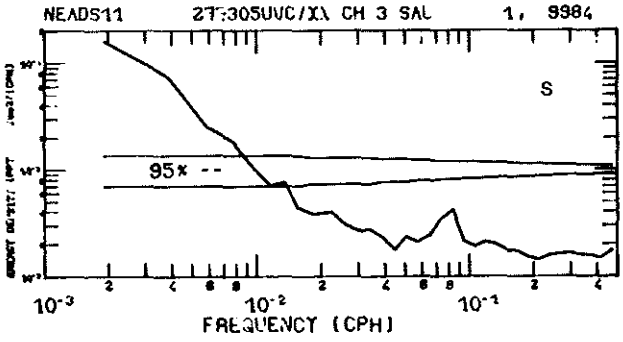
277304,735m

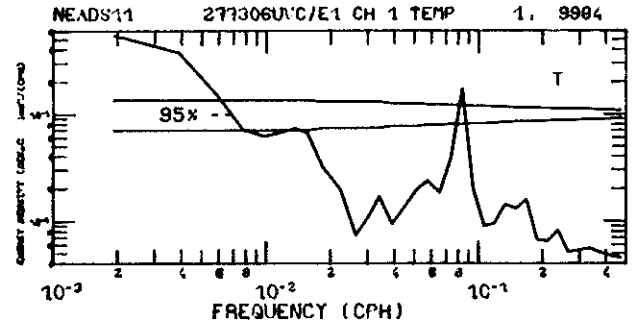

NEADS11 277305UVC/XX CH 1 PRES 1, 9984
P
95% --
ENERGY DENSITY (DBAR
FREQUENCY (CPH)

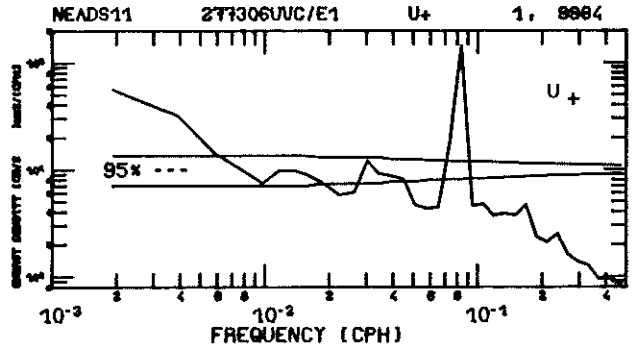

NEADS11 277305UVC/XX U+ 1, 9984
U +
95% ---
FREQUENCY (CPH)

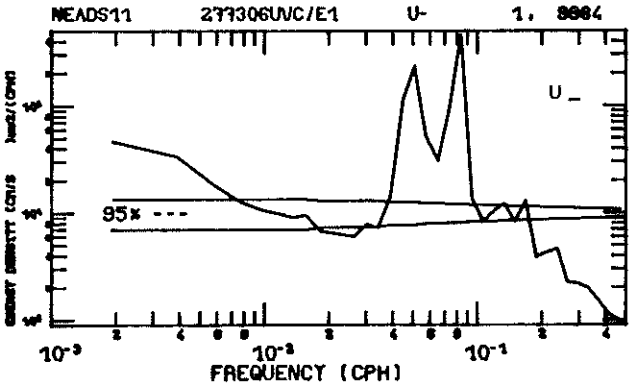

NEADS11 277305UVC/XX CH 2 TEMP 1, 9984
T
95% --
FREQUENCY (CPH)

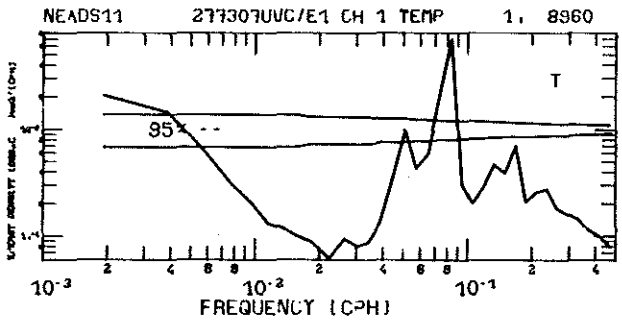

NEADS11 277305UVC/XX U- 1, 9984
U _
95% ---
FREQUENCY (CPH)

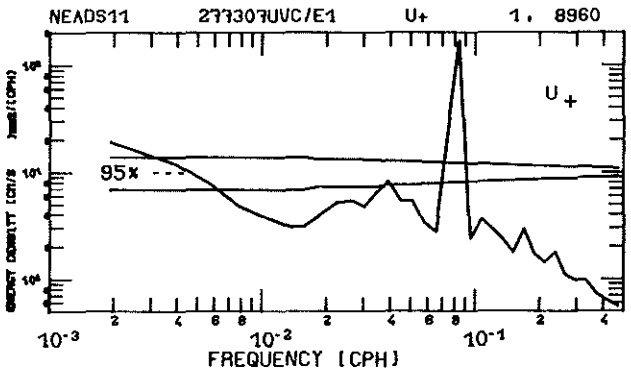

NEADS11 277305UVC/XX CH 3 SAL 1, 9984
S
95% --
FREQUENCY (CPH)

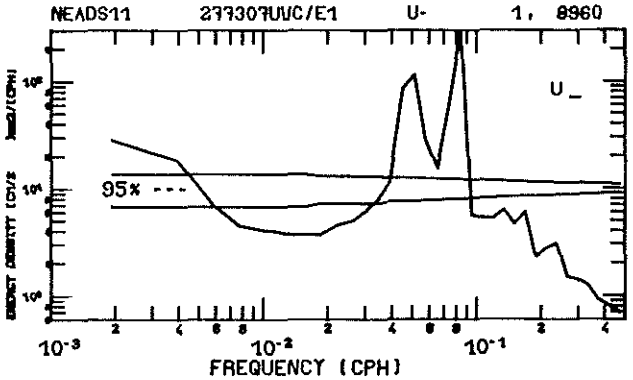

NEADS11 277306UVC/E1 CH 1 TEMP 1. 9904
T
95% - -
10^{-3}
10^{-2}
10^{-1}
FREQUENCY (CPH)


NEADS11 277306UVC/E1 U+ 1. 9904
U +
95% ---
10^{-3}
10^{-2}
10^{-1}
FREQUENCY (CPH)


NEADS11 277306UVC/E1 U- 1. 9904
U -
95% ---
10^{-3}
10^{-2}
10^{-1}
FREQUENCY (CPH)







277307,3090m

FILE: NEADS11 277301/A 024 MOORING ID: 277301 START-CYCLE: 1. STOP-CYCLE: 150. NUMBER OF VALUES: 150.

TIME RANGE: 11. 3.1982 2:30: 0: 0/ 7. 8.1982 2:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.14400D+04 277 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	PRES	[DBAR]	0.2675E+03	0.2832E+03	0.2696E+03	0.2397E+00	0.8618E+01	0.2936E+01	0.3133E+01	0.1299E+02
2	TEMP	[DEG.C]	0.1273E+02	0.1400E+02	0.1306E+02	0.1660E-01	0.4133E-01	0.2033E+00	0.1865E+01	0.8223E+01
3	UC	[CM/S]	-0.7133E+01	0.9739E+01	-0.1560E+01	0.2643E+00	0.1048E+02	0.3238E+01	0.1289E+01	0.4737E+01
4	VC	[CM/S]	-0.1629E+02	0.2318E+01	-0.3621E+01	0.3199E+00	0.1535E+02	0.3918E+01	-0.1235E+01	0.4666E+01

	VARIABLES		COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	PRES	2 TEMP	0.1980E+00	0.3317E+00	0.5952E+04	0.7715E+02	0.6299E+01
1	PRES	3 UC	0.3682E+00	0.3874E-01	0.7714E+06	0.8783E+03	0.7171E+02
1	PRES	4 VC	-0.9734E+01	-0.8463E+00	0.1175E+07	0.1084E+04	0.8849E+02
2	TEMP	3 UC	0.9319E-01	0.1416E+00	0.1826E+04	0.4273E+02	0.3489E+01
2	TEMP	4 VC	-0.2997E+00	-0.3762E+00	0.2710E+04	0.5205E+02	0.4250E+01
3	UC	4 VC	-0.1671E+00	-0.1317E-01	0.5783E+03	0.2405E+02	0.1963E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
3	4	0.3943E+01	0.1292E+02	0.3594E+01	0.2934E+00	203.30

FILE: NEADS11 277301/A /E1 MOORING ID: 277301 START-CYCLE: 1. STOP-CYCLE: 384. NUMBER OF VALUES: 384.

TIME RANGE: 11. 3.1982 2:30: 0: 0/29. 3.1983 2:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.14400D+04 277 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	PRES	[DBAR]	0.2657E+03	0.2832E+03	0.2682E+03	0.1157E+00	0.5140E+01	0.2267E+01	0.3813E+01	0.2212E+02
2	TEMP	[DEG.C]	0.1273E+02	0.1405E+02	0.1338E+02	0.1666E-01	0.1066E+00	0.3266E+00	-0.4808E-01	0.1823E+01

	VARIABLES		COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	PRES	2 TEMP	-0.2449E+00	-0.3307E+00	0.6828E+04	0.8263E+02	0.4217E+01

FILE: NEADS11 277302/A 012 MOORING ID: 277302 START-CYCLE: 1. STOP-CYCLE: 413. NUMBER OF VALUES: 412.

TIME RANGE: 11. 3.1982 2:30: 0: 0/26. 4.1983 2:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.14400D+04 281-331 m

VARIABLE		UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRODEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.1276E+02	0.1399E+02	0.1338E+02	0.1477E-01	0.9015E-01	0.3002E+00	-0.1550E+00	0.1856E+01
2	TEMP	[DEG.C]	0.1271E+02	0.1395E+02	0.1334E+02	0.1459E-01	0.8795E-01	0.2966E+00	-0.1698E+00	0.1880E+01
3	TEMP	[DEG.C]	0.1267E+02	0.1389E+02	0.1328E+02	0.1438E-01	0.8546E-01	0.2923E+00	-0.1737E+00	0.1893E+01
4	TEMP	[DEG.C]	0.1260E+02	0.1382E+02	0.1321E+02	0.1415E-01	0.8265E-01	0.2875E+00	-0.1775E+00	0.1895E+01
5	TEMP	[DEG.C]	0.1255E+02	0.1376E+02	0.1315E+02	0.1392E-01	0.8003E-01	0.2829E+00	-0.1783E+00	0.1910E+01
6	TEMP	[DEG.C]	0.1251E+02	0.1372E+02	0.1311E+02	0.1374E-01	0.7794E-01	0.2792E+00	-0.1780E+00	0.1915E+01
7	TEMP	[DEG.C]	0.1245E+02	0.1363E+02	0.1304E+02	0.1351E-01	0.7535E-01	0.2745E+00	-0.1811E+00	0.1931E+01
8	TEMP	[DEG.C]	0.1239E+02	0.1355E+02	0.1296E+02	0.1326E-01	0.7263E-01	0.2695E+00	-0.1828E+00	0.1933E+01
9	TEMP	[DEG.C]	0.1236E+02	0.1350E+02	0.1293E+02	0.1307E-01	0.7060E-01	0.2657E+00	-0.1909E+00	0.1938E+01
10	TEMP	[DEG.C]	0.1233E+02	0.1344E+02	0.1288E+02	0.1284E-01	0.6814E-01	0.2610E+00	-0.1926E+00	0.1949E+01
11	TEMP	[DEG.C]	0.1227E+02	0.1336E+02	0.1282E+02	0.1257E-01	0.6525E-01	0.2554E+00	-0.2084E+00	0.1951E+01

VARIABLES	COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV

FILE: NEADS11 277303/A 024 MOORING ID: 277303 START-CYCLE: 1. STOP-CYCLE: 412. NUMBER OF VALUES: 412.

TIME RANGE: 11. 3.1982 2:30: 0: 0/26. 4.1983 2:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.14400D+04 535 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.1067E+02	0.1147E+02	0.1118E+02	0.7075E-02	0.2062E-01	0.1436E+00	-0.5039E+00	0.3576E+01
2	SAL	[PPT]	0.3537E+02	0.3568E+02	0.3547E+02	0.3009E-02	0.3731E-02	0.6108E-01	0.7541E+00	0.2809E+01
3	UC	[CM/S]	-0.1201E+02	0.9734E+01	-0.2198E+01	0.1734E+00	0.1238E+02	0.3519E+01	0.4541E-01	0.3895E+01
4	VC	[CM/S]	-0.1342E+02	0.1080E+02	-0.1030E+01	0.1894E+00	0.1477E+02	0.3843E+01	-0.2405E+00	0.4199E+01
5	SIGT	[ ]	0.2702E+02	0.2728E+02	0.2713E+02	0.3051E-02	0.3836E-02	0.6193E-01	0.4270E+00	0.2146E+01

	VARIABLES		COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	TEMP	2 SAL	-0.3063E-02	-0.3492E+00	0.2397E+02	0.4896E+01	0.2412E+00
1	TEMP	3 UC	-0.9640E-01	-0.1908E+00	0.1540E+04	0.3924E+02	0.1933E+01
1	TEMP	4 VC	0.9032E-01	0.1636E+00	0.1821E+04	0.4268E+02	0.2103E+01
1	TEMP	5 SIGT	-0.6181E-02	-0.6949E+00	0.1191E+02	0.3452E+01	0.1701E+00
2	SAL	3 UC	0.2807E-01	0.1306E+00	0.1555E+05	0.1247E+03	0.6144E+01
2	SAL	4 VC	-0.5928E-01	-0.2525E+00	0.1858E+05	0.1363E+03	0.6715E+01
2	SAL	5 SIGT	0.3467E-02	0.9165E+00	0.1426E+02	0.3776E+01	0.1860E+00
3	UC	4 VC	0.5372E+01	0.3972E+00	0.3786E+03	0.1946E+02	0.9586E+00
3	UC	5 SIGT	0.3945E-01	0.1810E+00	0.9100E+04	0.9539E+02	0.4700E+01
4	VC	5 SIGT	-0.6272E-01	-0.2635E+00	0.1068E+05	0.1043E+03	0.5138E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
3	4	0.2427E+01	0.1358E+02	0.3685E+01	0.1815E+00	244.88

FILE: NEADS11 277304/A /E1 MOORING ID: 277304 START-CYCLE: 1. STOP-CYCLE: 412. NUMBER OF VALUES: 412.

TIME RANGE: 11. 3.1982 2:30: 0: 0/26. 4.1983 2:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.14400D+04 735 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.9531E+01	0.1059E+02	0.1011E+02	0.7698E-02	0.2442E-01	0.1563E+00	-0.7883E+00	0.5105E+01
2	SAL	[PPT]	0.3540E+02	0.3562E+02	0.3550E+02	0.1779E-02	0.1304E-02	0.3611E-01	0.1306E+00	0.3268E+01
3	SIGT	[ ]	0.2728E+02	0.2748E+02	0.2734E+02	0.1440E-02	0.8546E-03	0.2923E-01	0.5836E+00	0.4074E+01

	VARIABLES		COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	TEMP	2 SAL	0.2466E-02	0.4370E+00	0.3268E+02	0.5717E+01	0.2817E+00
1	TEMP	3 SIGT	-0.2270E-02	-0.4970E+00	0.1712E+02	0.4137E+01	0.2038E+00
2	SAL	3 SIGT	0.5919E-03	0.5607E+00	0.3201E+01	0.1789E+01	0.8815E-01

FILE: NEADS11 277305/A 024 MOORING ID: 277305 START-CYCLE: 1. STOP-CYCLE: 412. NUMBER OF VALUES: 412.

TIME RANGE: 11. 3.1982 2:30: 0: 0/20. 4.1983 2:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 1140 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	PRES	[DBAR]	0.1142E+04	0.1148E+04	0.1142E+04	0.3757E-01	0.5814E+00	0.7625E+00	0.7474E+01	0.5692E+02
2	TEMP	[DEG.C]	0.7834E+01	0.9640E+01	0.8535E+01	0.1538E-01	0.9751E-01	0.3123E+00	0.8371E+00	0.4470E+01
3	SAL	[PPT]	0.3547E+02	0.3591E+02	0.3565E+02	0.3792E-02	0.5924E-02	0.7697E-01	0.1103E+01	0.4998E+01
4	UC	[CM/S]	-0.4151E+01	0.1980E+01	-0.1281E+01	0.6135E-01	0.1551E+01	0.1245E+01	0.3335E+00	0.2730E+01
5	VC	[CM/S]	-0.4663E+01	0.4151E+01	-0.2878E+00	0.7628E-01	0.2397E+01	0.1548E+01	-0.3947E+00	0.2982E+01
6	SIGT	[ ]	0.2767E+02	0.2779E+02	0.2772E+02	0.1461E-02	0.8797E-03	0.2966E-01	0.6476E+00	0.2509E+01

	VARIABLES		COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	PRES	2 TEMP	0.1967E-01	0.8262E-01	0.1276E+06	0.3572E+03	0.1760E+02
1	PRES	3 SAL	0.1103E-01	0.1679E+00	0.9370E+04	0.9680E+02	0.4769E+01
1	PRES	4 UC	-0.1114E+00	-0.1173E+00	0.2023E+07	0.1422E+04	0.7007E+02
1	PRES	5 VC	-0.3008E+00	-0.2548E+00	0.3129E+07	0.1769E+04	0.8714E+02
1	PRES	6 SIGT	0.5533E-02	0.2446E+00	0.1947E+04	0.4412E+02	0.2174E+01
2	TEMP	3 SAL	0.2091E-01	0.8701E+00	0.1376E+03	0.1173E+02	0.5779E+00
2	TEMP	4 UC	-0.6927E-02	-0.1781E-01	0.1090E+03	0.1044E+02	0.5143E+00
2	TEMP	5 VC	-0.2184E+00	-0.4518E+00	0.1768E+03	0.1330E+02	0.6551E+00
2	TEMP	6 SIGT	0.8253E-03	0.8911E-01	0.7543E+02	0.8685E+01	0.4279E+00
3	SAL	4 UC	-0.7921E-02	-0.8265E-01	0.1967E+04	0.4435E+02	0.2185E+01
3	SAL	5 VC	-0.6365E-01	-0.5341E+00	0.3051E+04	0.5524E+02	0.2721E+01
3	SAL	6 SIGT	0.1297E-02	0.5682E+00	0.8241E+01	0.2871E+01	0.1414E+00
4	UC	5 VC	0.5564E+00	0.2886E+00	0.7888E+01	0.2809E+01	0.1384E+00
4	UC	6 SIGT	-0.4938E-02	-0.1337E+00	0.1192E+04	0.3452E+02	0.1701E+01
5	VC	6 SIGT	-0.1513E-01	-0.3294E+00	0.1844E+04	0.4294E+02	0.2116E+01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
4	5	0.1313E+01	0.1974E+01	0.1405E+01	0.6922E-01	257.33

FILE: NEADS11 277306/A 024 MOORING ID: 277306 START-CYCLE: 1. STOP-CYCLE: 412. NUMBER OF VALUES: 412.

TIME RANGE: 11. 3.1982 2:30: 0: 0/26. 4.1983 2:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 1640 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.4611E+01	0.5464E+01	0.4944E+01	0.9666E-02	0.3850E-01	0.1962E+00	0.4637E+00	0.2112E+01
2	UC	[CM/S]	-0.4313E+01	0.2889E+01	-0.4381E+00	0.6347E-01	0.1660E+01	0.1288E+01	-0.1108E+00	0.3207E+01
3	VC	[CM/S]	-0.5102E-01	0.2497E+01	-0.2495E+00	0.7193E-01	0.2131E+01	0.1460E+01	-0.6968E+00	0.3298E+01

	VARIABLES		COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	TEMP	2 UC	-0.8122E-01	-0.3213E+00	0.4052E+02	0.6365E+01	0.3136E+00
1	TEMP	3 VC	-0.8995E-01	-0.3140E+00	0.5221E+02	0.7225E+01	0.3560E+00
2	UC	3 VC	0.4302E+00	0.2287E+00	0.5331E+01	0.2309E+01	0.1137E+00

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
2	3	0.5042E+00	0.1896E+01	0.1377E+01	0.6783E-01	240.34

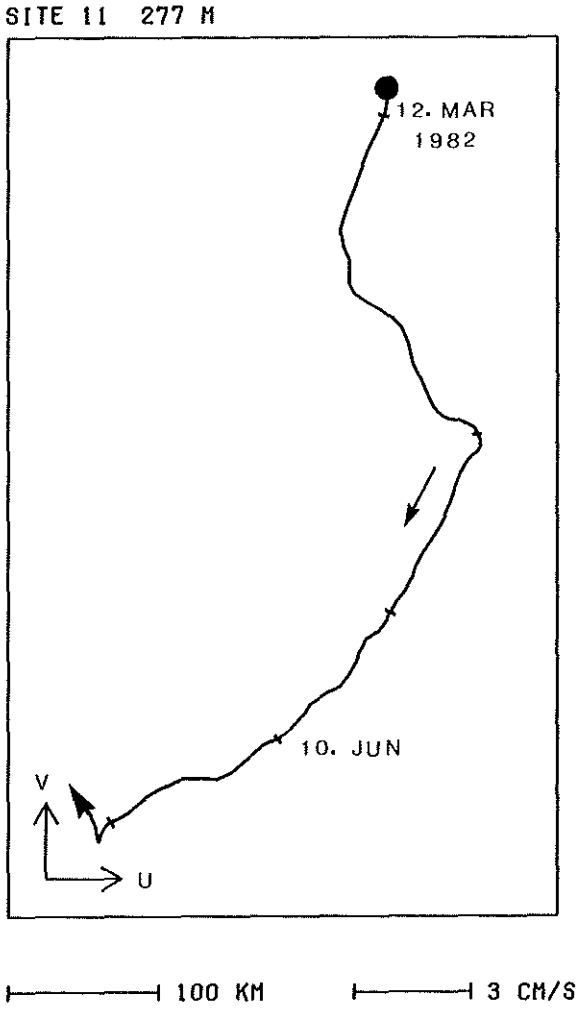
FILE: NEADS11 277307/A 024 MOORING ID: 277307 START-CYCLE: 1. STOP-CYCLE: 372. NUMBER OF VALUES: 372.

TIME RANGE: 11. 3.1982 2:30: 0: 0/17. 3.1983 2:30: 0: 0/ SAMPLING INTERVAL (MINUTES) : 0.144000+04 3090 m

	VARIABLE	UNITS	MINIMUM	MAXIMUM	MEAN	STERMEAN	VARIANCE	STRDDEV	SKEWNESS	KURTOSIS
1	TEMP	[DEG.C]	0.2773E+01	0.2822E+01	0.2799E+01	0.4782E-03	0.8506E-04	0.9223E-02	-0.7788E-01	0.2911E+01
2	UC	[CM/S]	-0.3282E+01	0.3332E+01	0.5572E+00	0.5312E-01	0.1050E+01	0.1025E+01	-0.9278E+00	0.5034E+01
3	VC	[CM/S]	-0.1765E+01	0.3513E+01	0.5267E+00	0.4659E-01	0.8074E+00	0.8986E+00	0.5035E+00	0.3422E+01

	VARIABLES	COVAR	CORCOEFF	VARCORRL	STDEVCOV	STERRCOV
1	TEMP 2 UC	0.1094E-02	0.1157E+00	0.8267E+01	0.2875E+01	0.1491E+00
1	TEMP 3 VC	-0.7219E-03	-0.8711E-01	0.8334E+01	0.2517E+01	0.1305E+00
2	UC 3 VC	0.4242E+00	0.4607E+00	0.2210E+01	0.1487E+01	0.7708E-01

PAIR		VECTOR-MEAN	VECTOR-VAR	STDVECMEAN	VECMEANERR	DIR-MEAN
2	3	0.7667E+00	0.9286E+00	0.9636E+00	0.4996E-01	46.61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V
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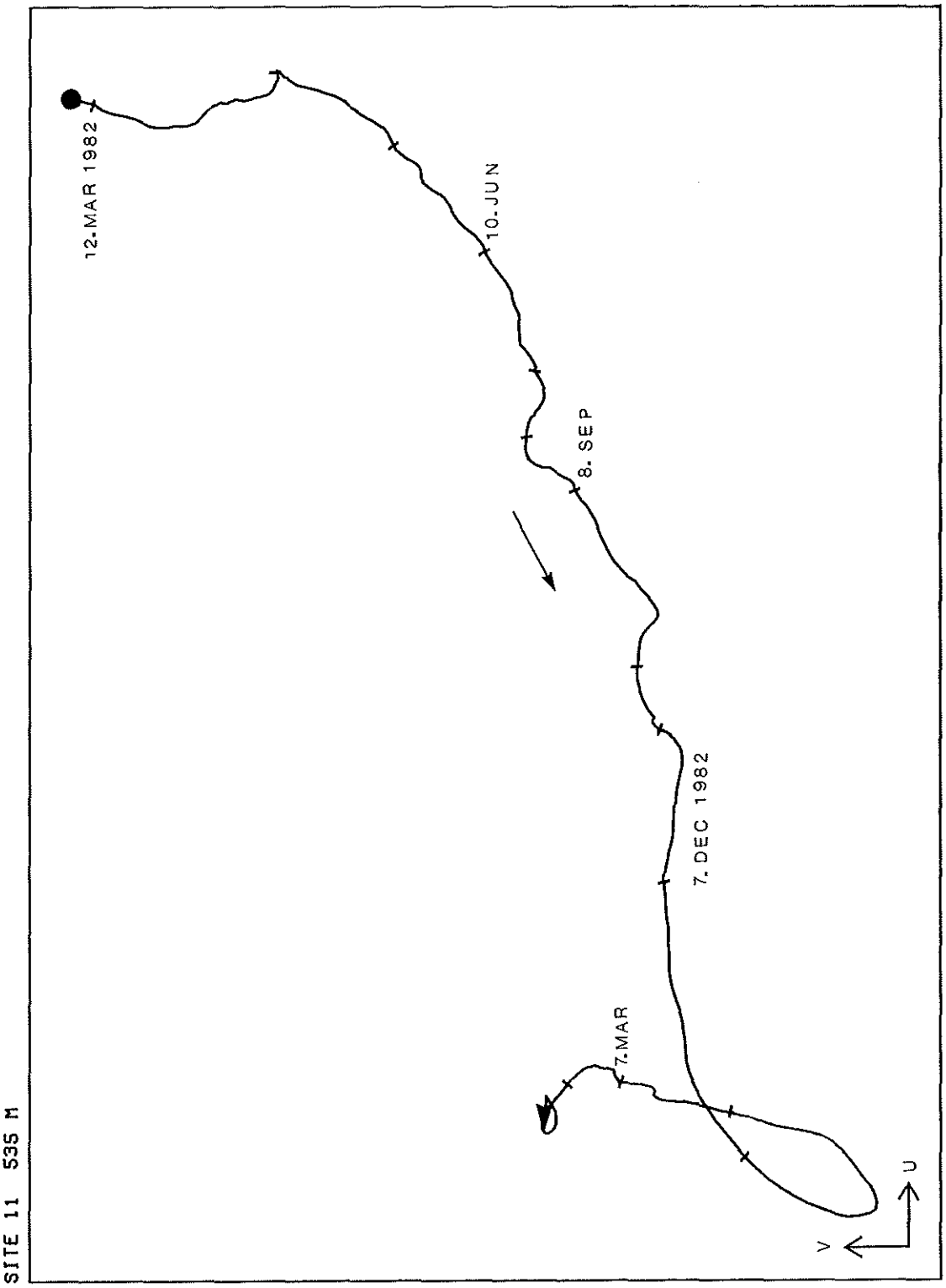
3 CM/S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7.MAR
U
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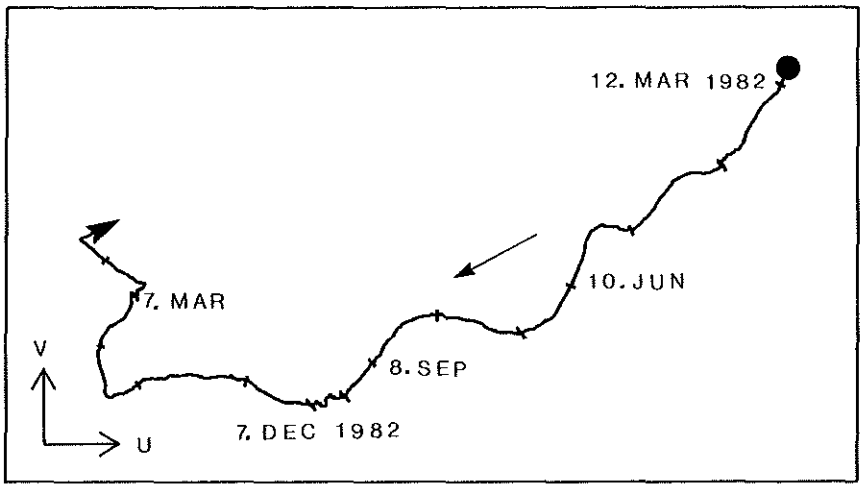

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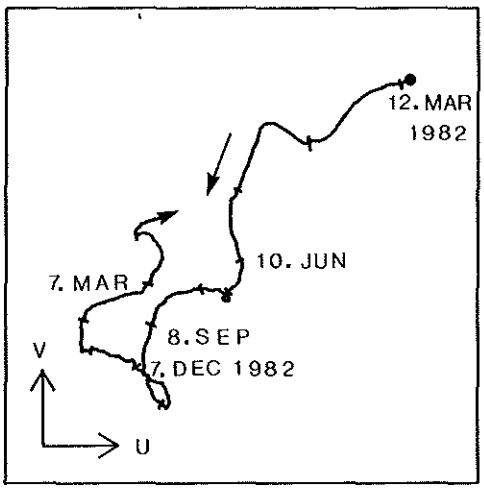

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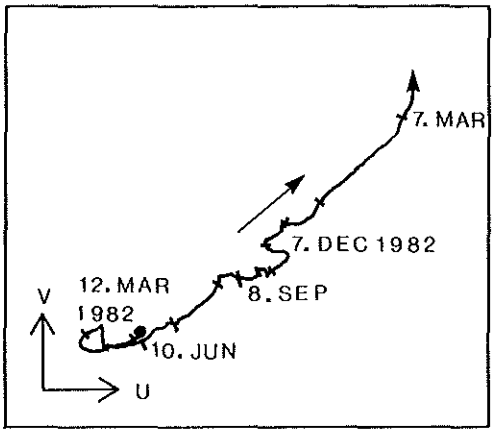

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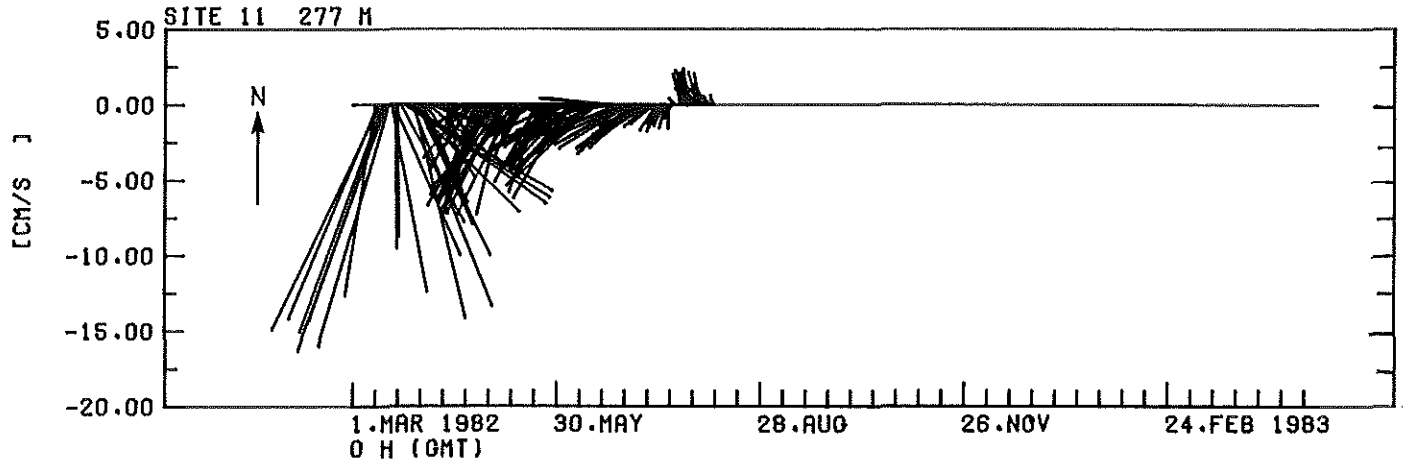
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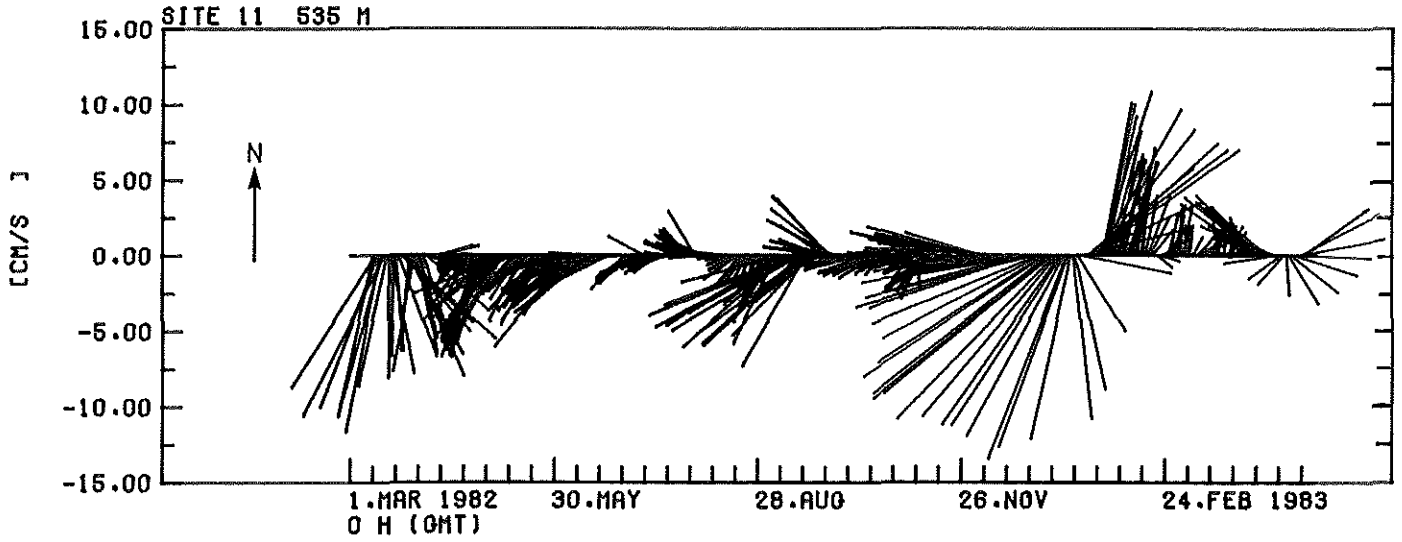
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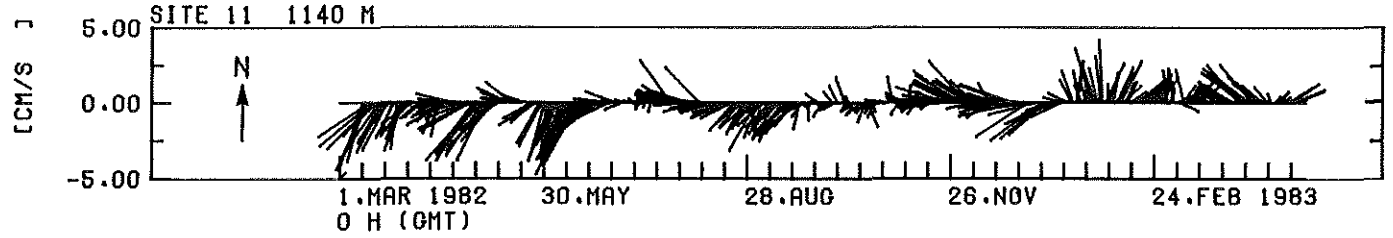
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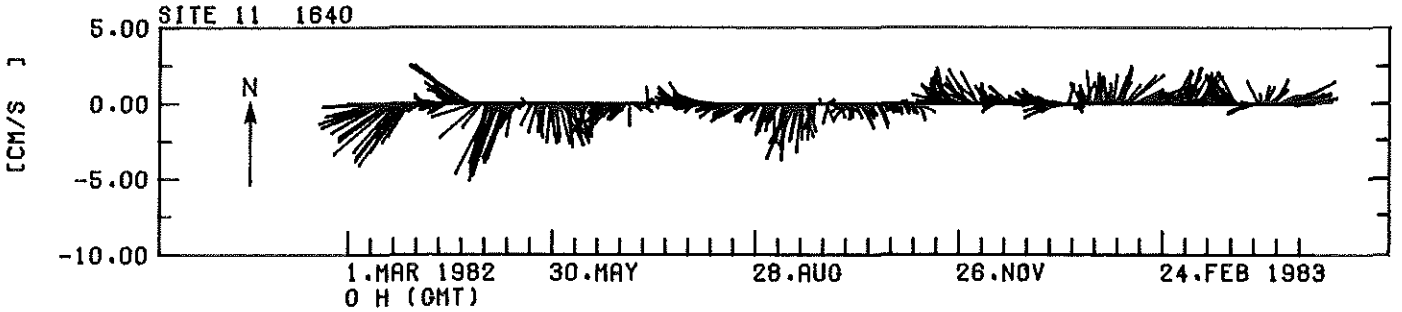
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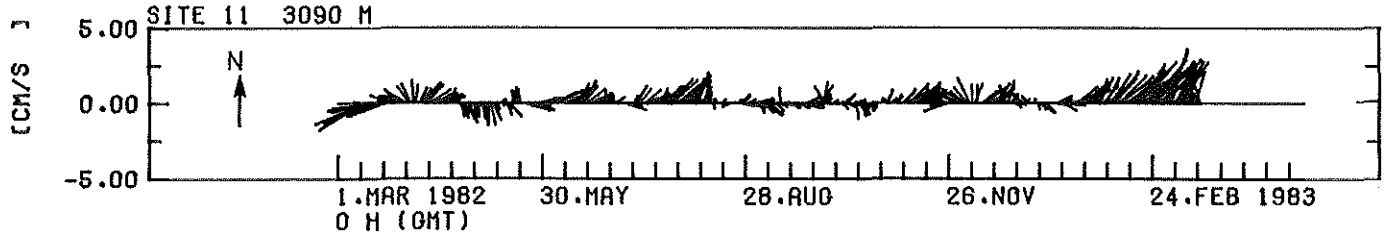
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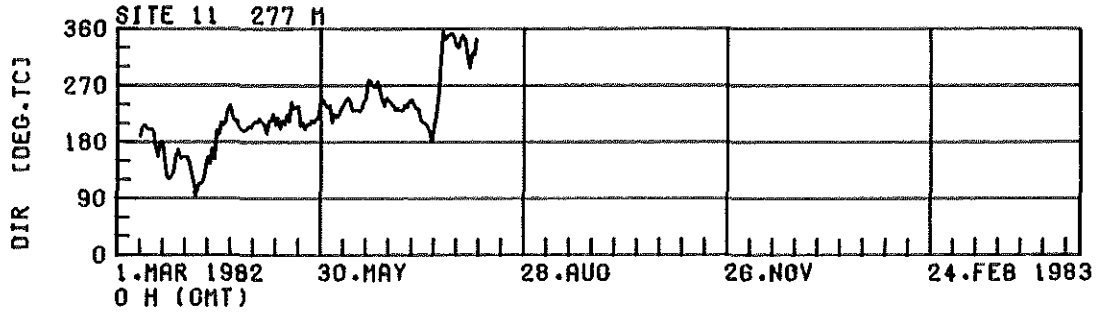
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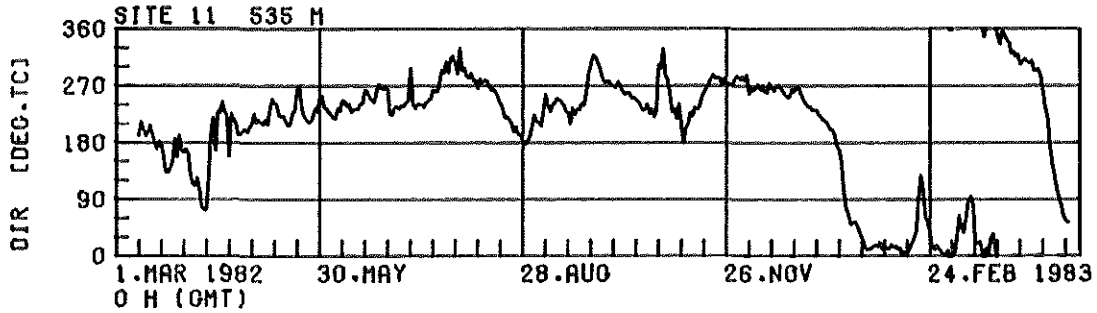
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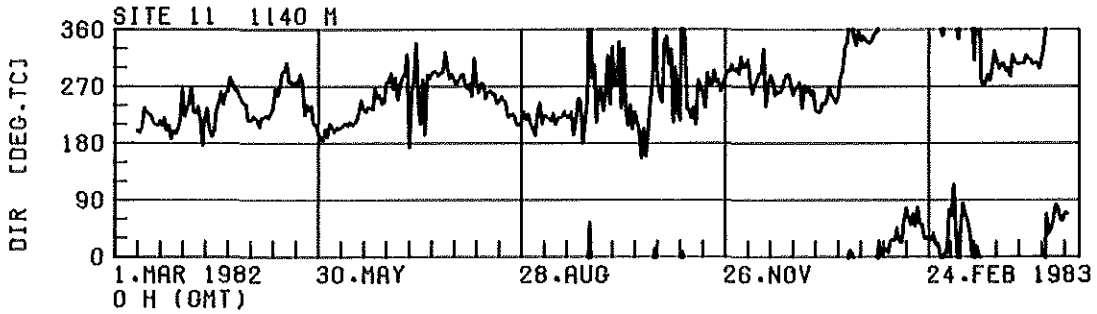
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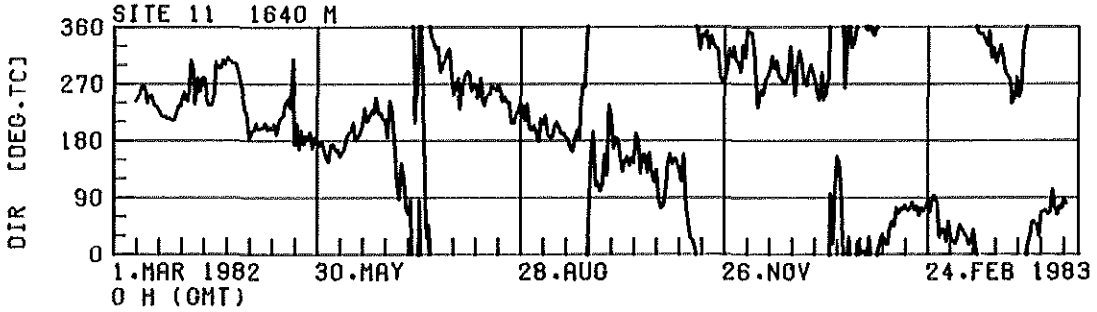
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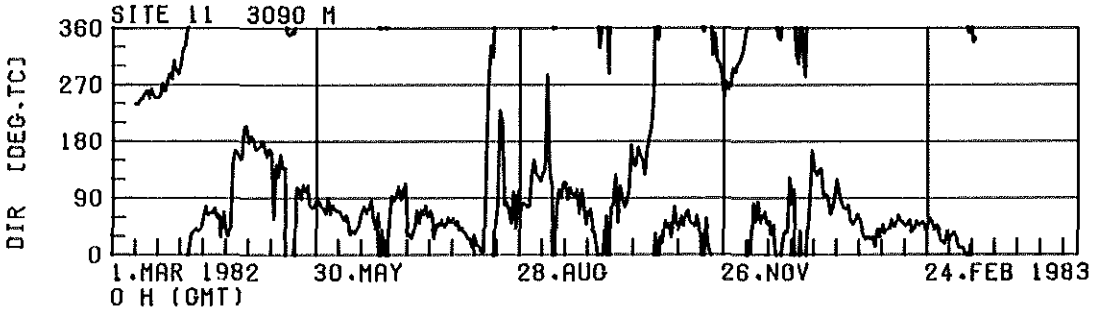
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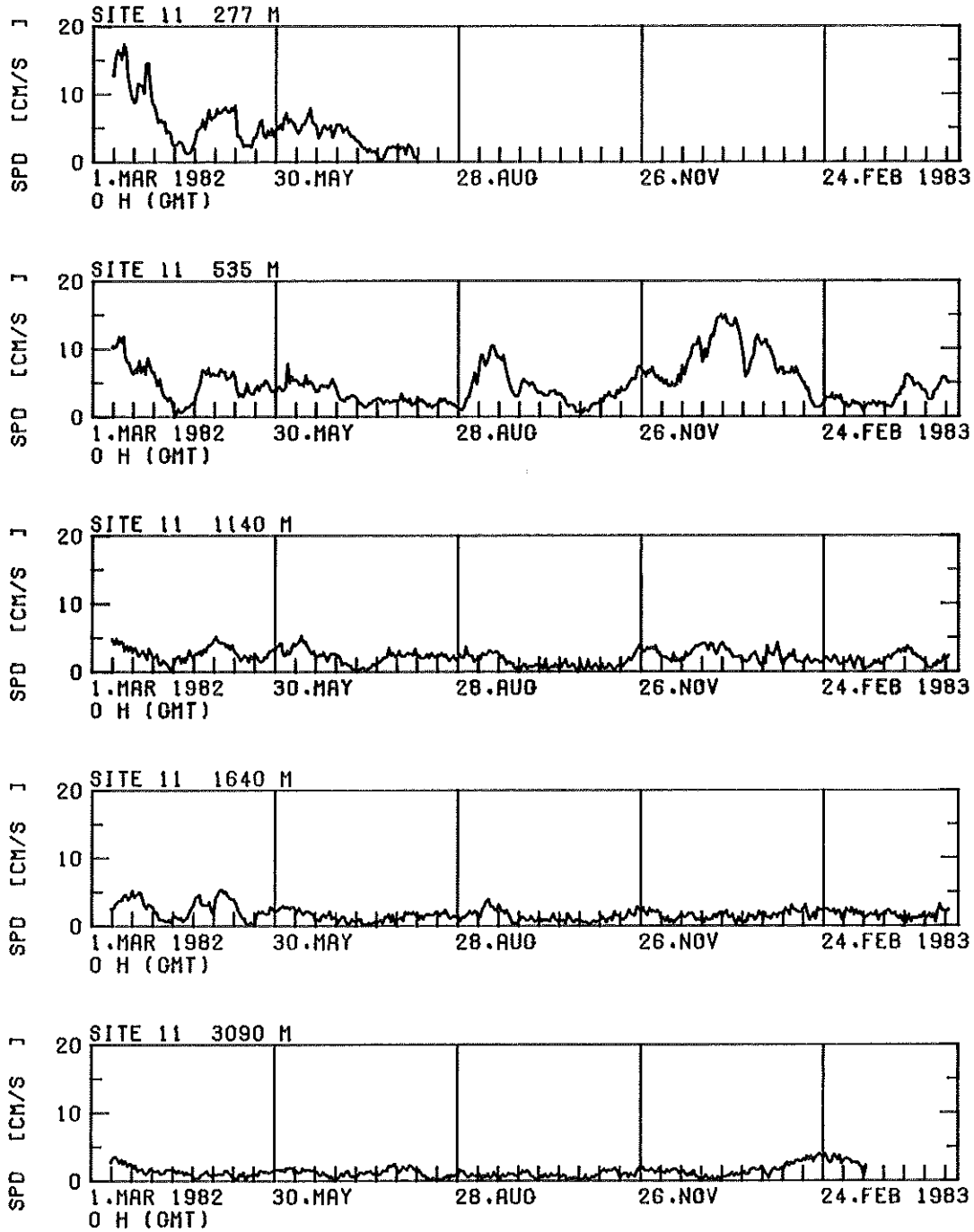
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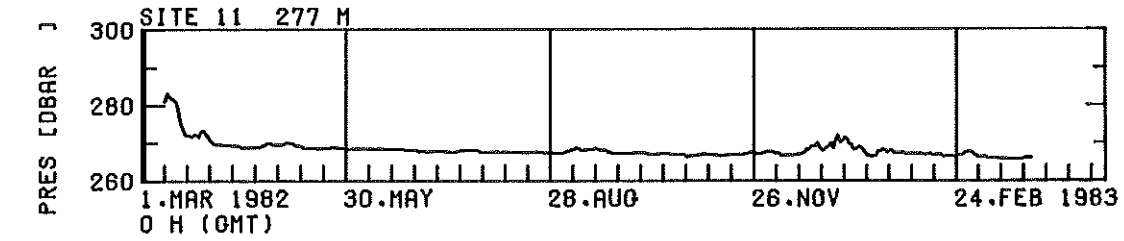
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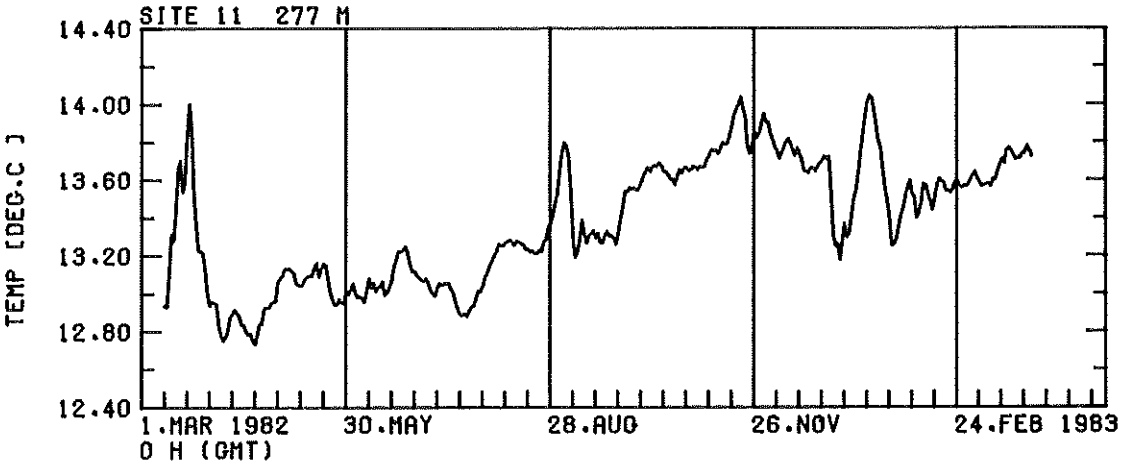
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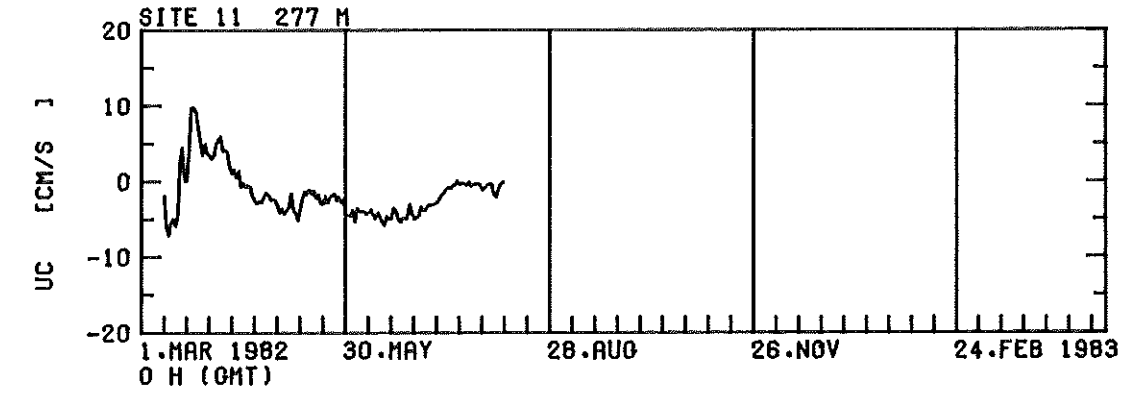
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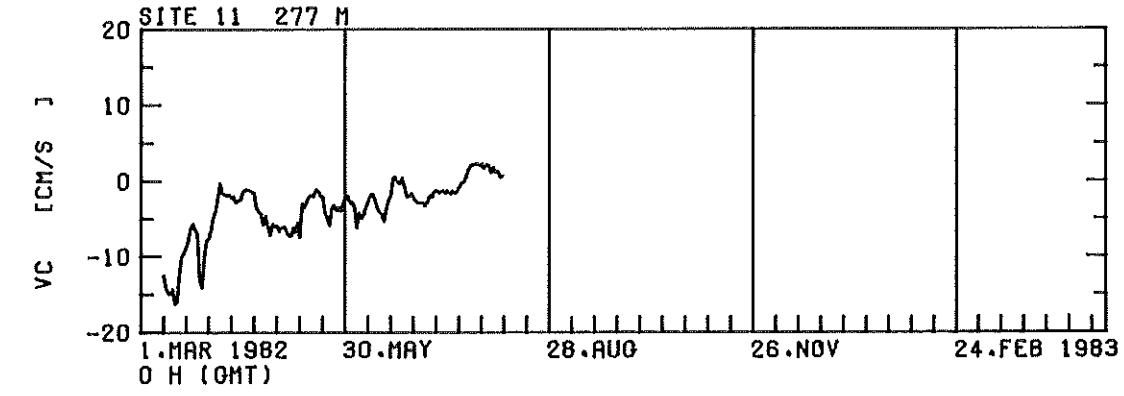
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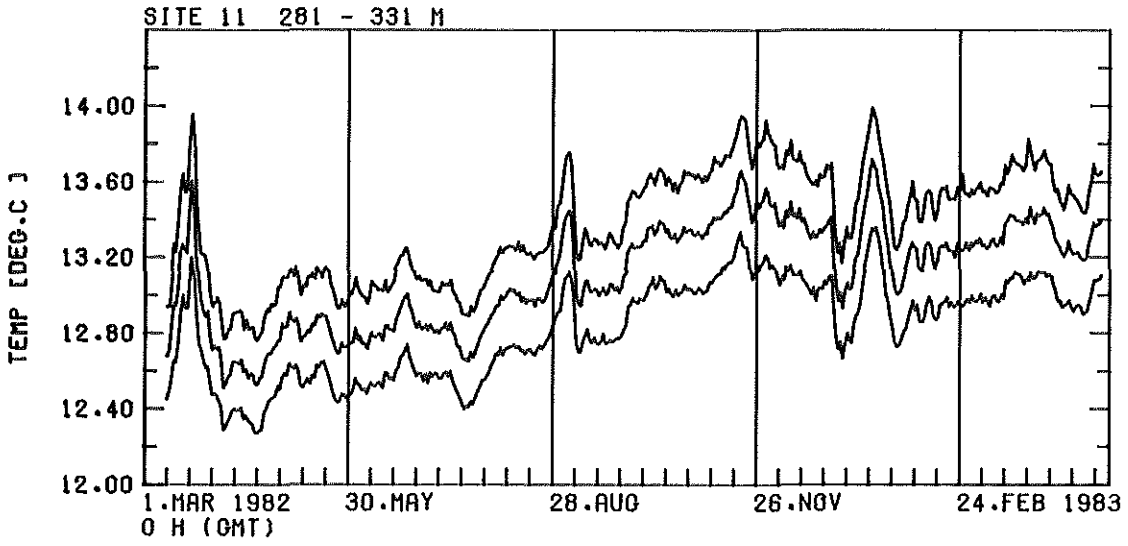
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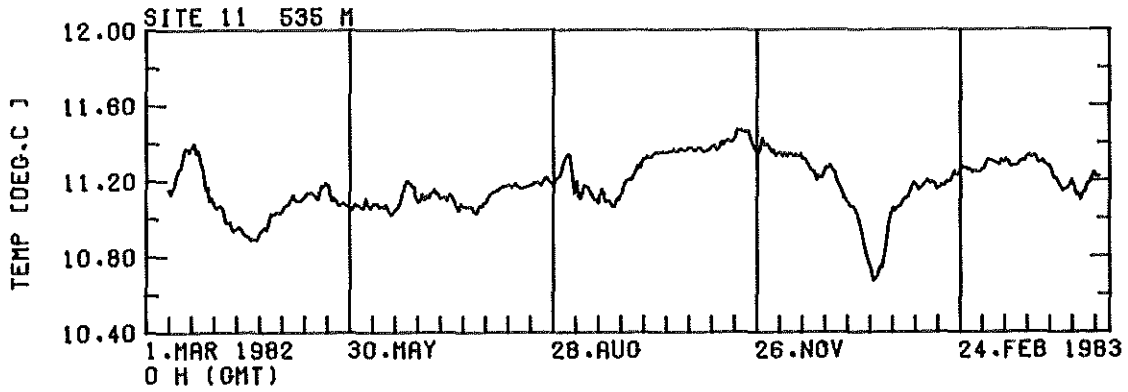
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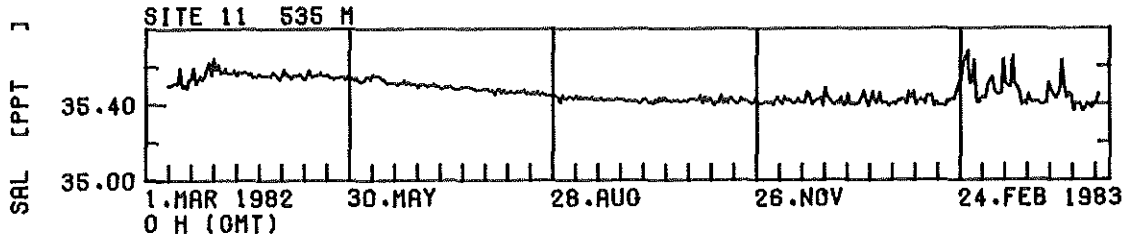
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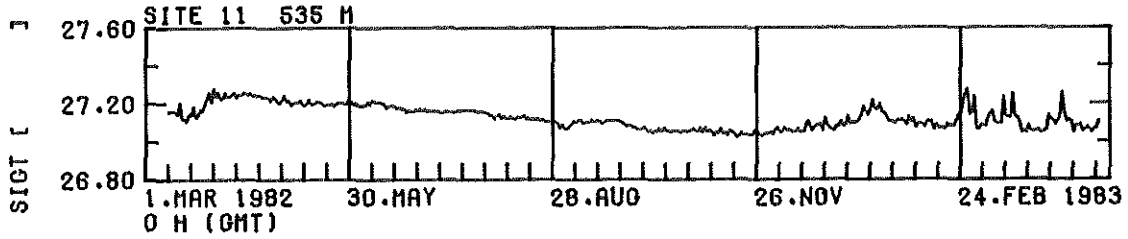
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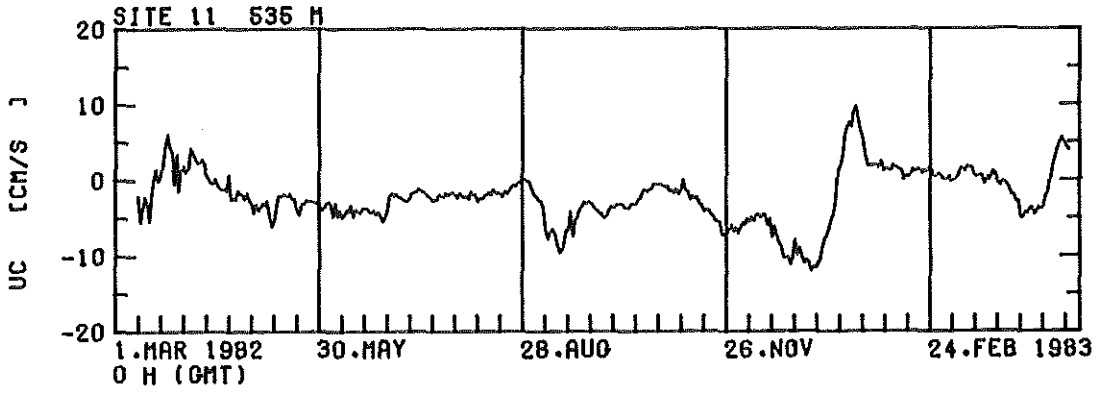
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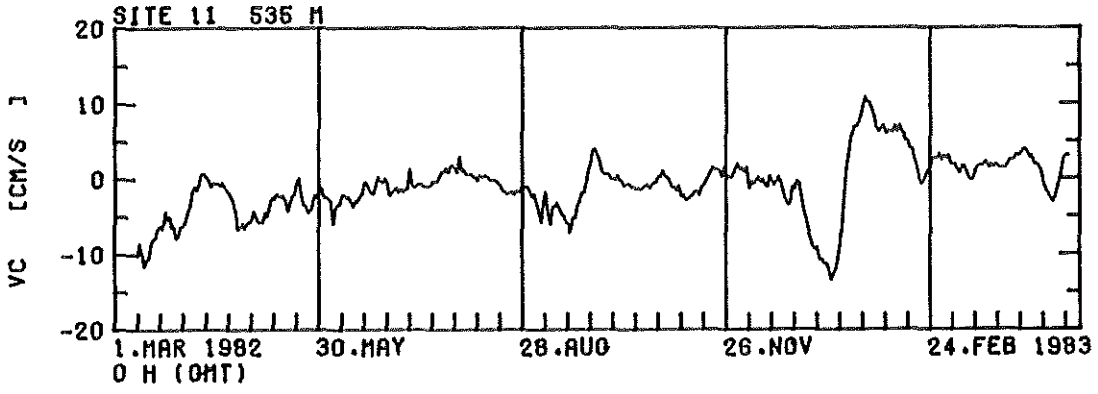
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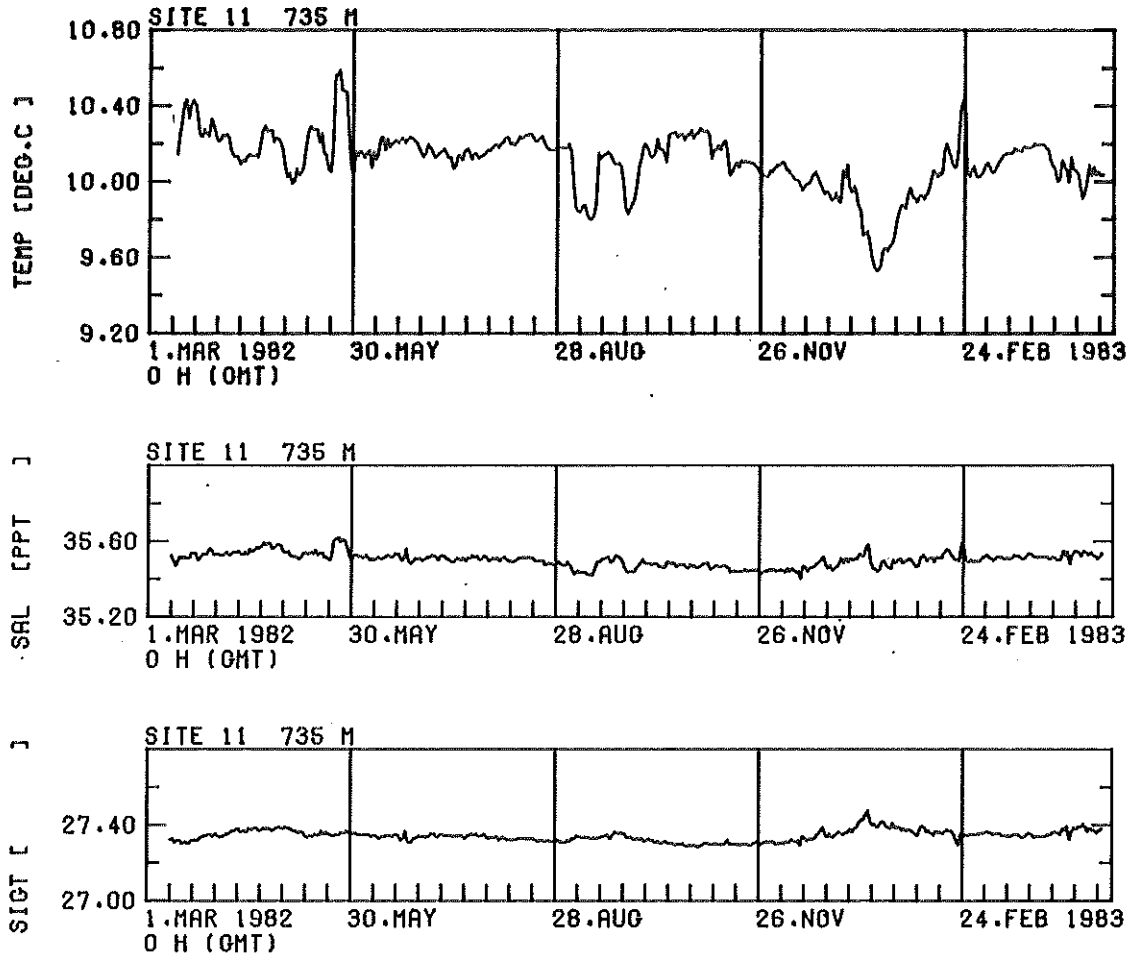
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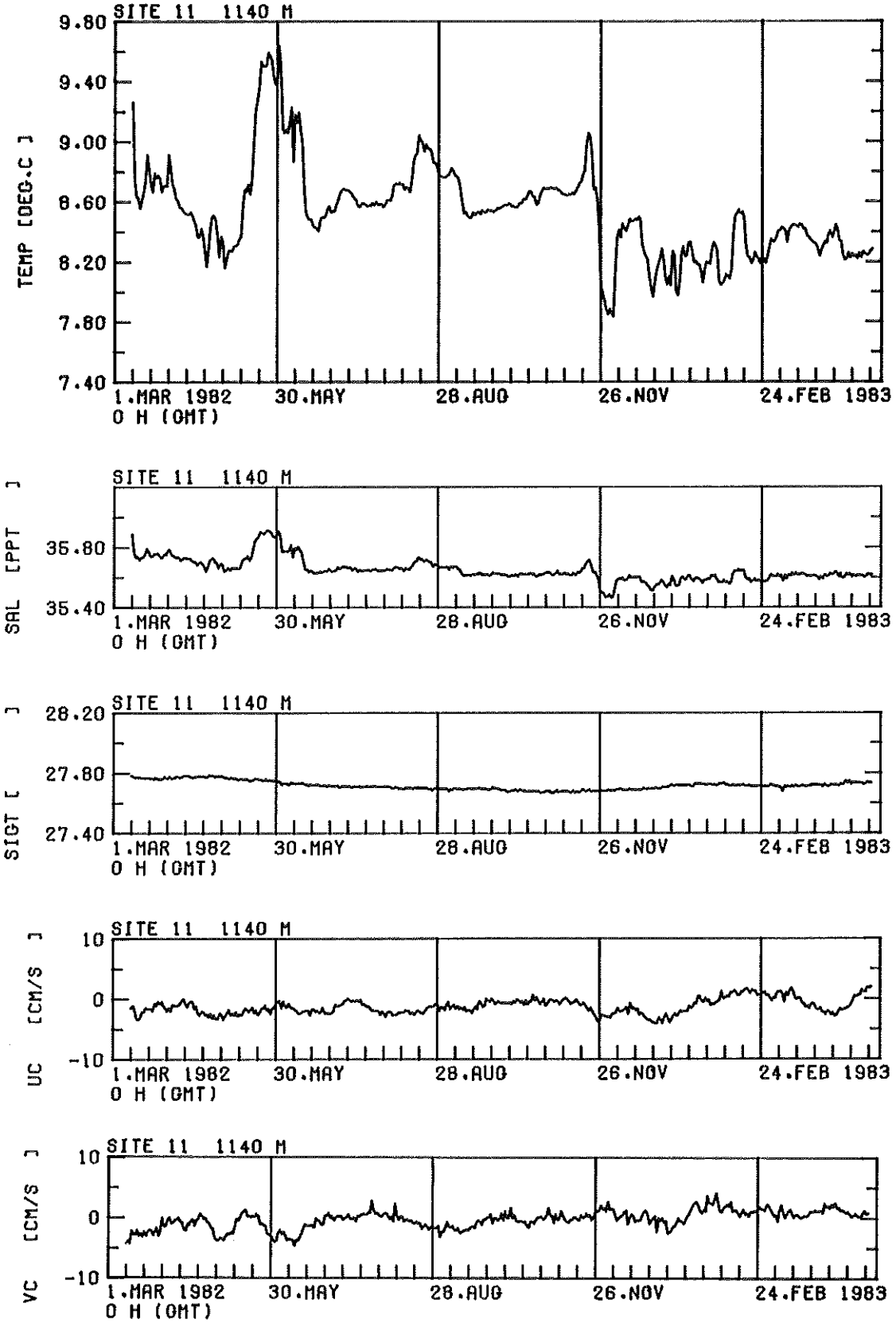
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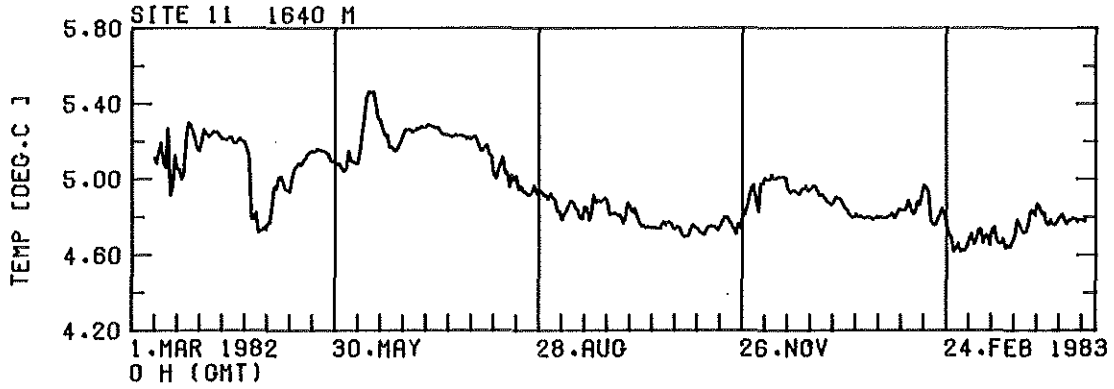
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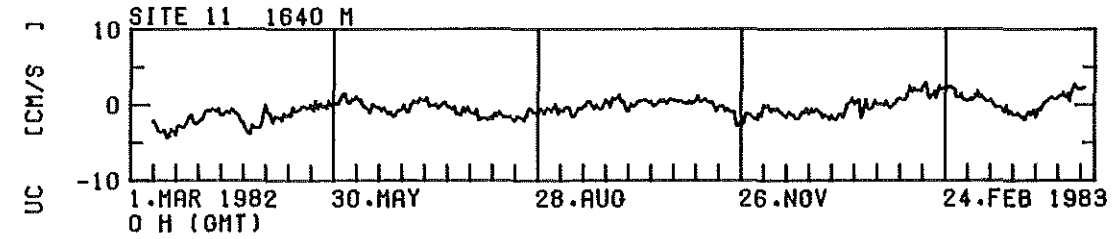
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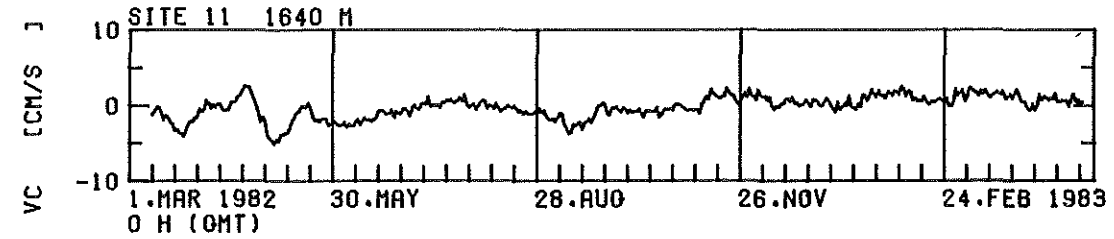
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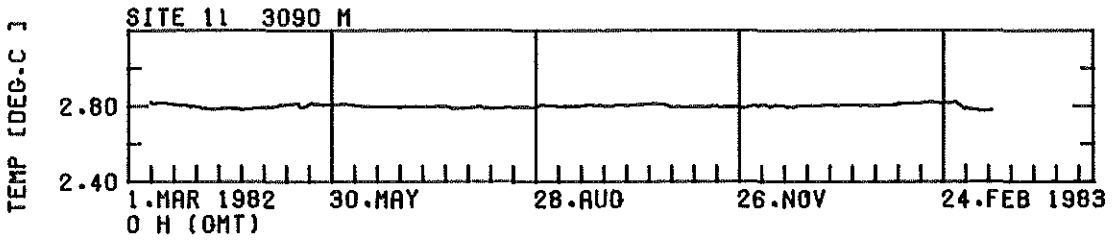
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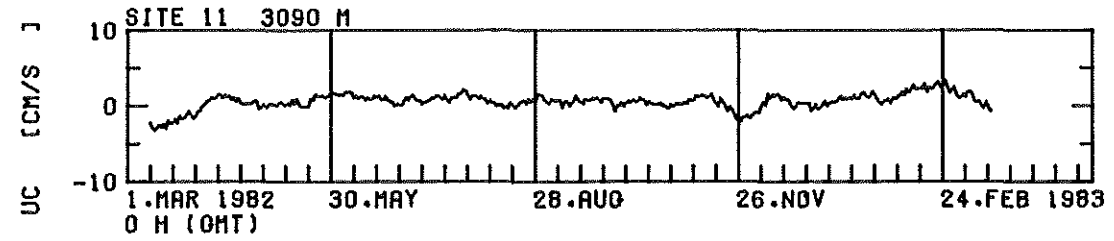
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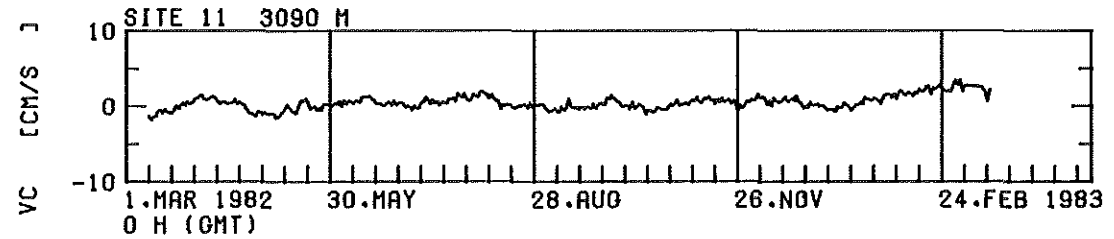
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28.AUG
26.NOV
24.FEB 1983
0 H (GMT)

List of symbols

Press, P	Pressure (dbar)
Temp, T	Temperature (C)
Sal, S	Salinity (Practical Salinity units)
Sigt	Density parameter (kg m^{-3})
UC, VC	East and North component of velocity vector (cm/s)
u_+, u_-	rotary components of velocity vector (cm/s), clock/anticlockwise
$\lvert \vec{u} \rvert$	current speed (cm/s)
ϕ	current direction (TC north)

Appendix 1: Lanczos Taper:

The following filter weights have been used for low pass filtering:

$$w(i) = \frac{m}{\pi(i-1)} \sin\left(\frac{\pi(i-1)}{m}\right) \qquad i = 2,3, \ldots m;\ m = 67$$

Appendix 2: Rotary components

According to Willebrand et al. (1977) rotary components u_+ and u_- may be defined by

$$u_\pm = \sqrt{1/2}\ (uc \pm i\ vc)$$

with uc and vc as East- and North-components of the velocity vector and $i = \sqrt{-1}$. The autospectra E_+ and E_- are related to the autospectra E_{uu} and E_{vv} and the quadrature spectrum Q_{uv} of the Cartesian components uc, vc by

$$E_\pm(\omega) = 1/2\ (E_{uu}(\omega) + E_{vv}(\omega) \pm 2\ Q_{uv}(\omega));\ \omega \geq 0.$$

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eviations:
- Stat. Statistics
- Spec. Spectra
- PVD Progressive Vector Diagramme
- Sticks Vector time series plot